

THE **CANCER CARE** PROGRAM

ANNUAL REPORT 2008



STONY BROOK  
UNIVERSITY  
MEDICAL CENTER



# WELCOME TO STONY BROOK UNIVERSITY MEDICAL CENTER



**Richard N. Fine, MD**  
Dean  
School of Medicine

**W**e are pleased to bring you our Cancer Care Program's 2008 annual report. As one of our leading programs, Cancer Care at Stony Brook not only exemplifies all that we stand for—bringing skilled and compassionate care to the people of Long Island—it also perfectly blends our three core strengths: clinical excellence, in which we have the resources to take on the most complex cases; cutting-edge research that advances the frontiers of science and

clinical practice; and top-flight medical education in which we shape the future of health-care by preparing tomorrow's medical practitioners.

This report presents an overview of our available services, details our approach to care, and covers highlights of the past year, including research breakthroughs, pioneering diagnostic and surgical procedures, new treatment protocols, and recently

acquired state-of-the-art technology. We've also included statistics on our volumes and diagnoses—all of which show why we are a major cancer care resource and a leading academic medical center on Long Island.

Whether you are a patient, a family member, or a referring physician, be assured that at Stony Brook University Medical Center, you will have access to state-of-the-art, compassionate cancer care.



**Steven L. Strongwater, MD**  
Chief Executive Officer  
Stony Brook University Hospital



**Lee Anne Xippolitos, RN, PhD**  
Chief Nursing Officer  
Stony Brook University Hospital

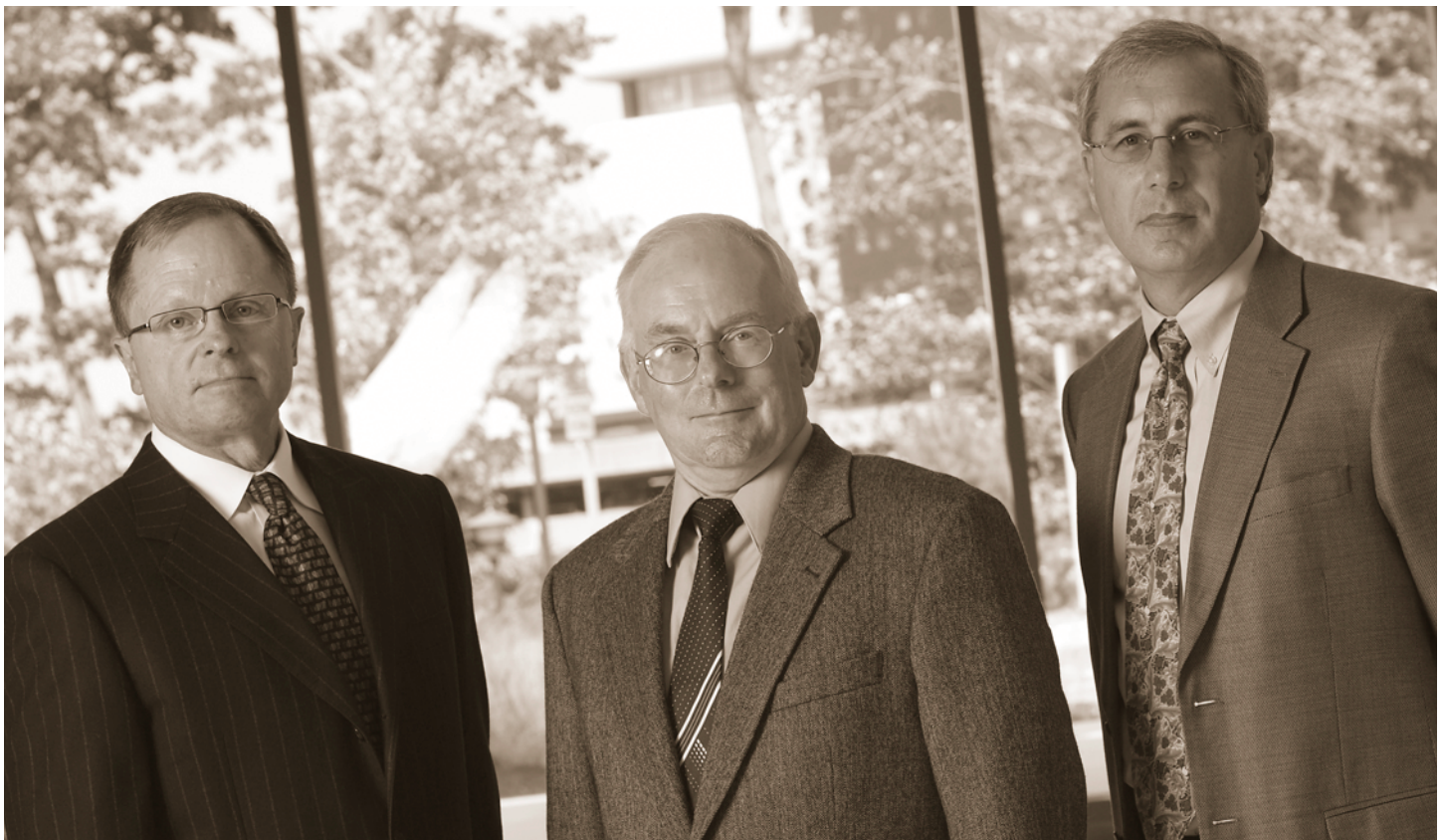


# Cancer Care at Stony Brook University Medical Center: A MESSAGE **FROM LEADERSHIP**

Theodore G. Gabig, MD, (left) Interim Director, Cancer Center, and Associate Director for Clinical Programs

Robert I. Parker, MD, (right) Associate Director for Clinical Programs and Director for Clinical Trials

Michael Hayman, PhD, (center) Associate Director for Research



HIGH QUALITY, COMPASSIONATE CARE.  
NATIONALLY RECOGNIZED PHYSICIANS. STATE-  
OF-THE-ART TECHNOLOGY. LEADING-EDGE  
PROTOCOLS. GROUNDBREAKING RESEARCH  
AND THERAPIES. COMPREHENSIVE AND  
COORDINATED PATIENT TREATMENT. These are the  
hallmarks of the Cancer Care Program at Stony Brook University  
Medical Center, which we believe is exceptional in every way.

In 2008, we continued to build on both our reputation and our solid foundation to create the leading cancer program in the region.

Highlights of the past year include the opening of our new 65,000-square-foot outpatient Cancer Center in early 2007; the recruitment of several new best-in-field oncology specialists; the naming of 24 Stony Brook physicians to the New

York area's "Best Doctors" list—a half dozen of whom work in our cancer program; the addition of advanced technology, including image-guided radiation therapy, stereotactic body radiotherapy, and a robot-assisted surgery program; receipt of millions of dollars in research grants; and furthering our role as a community leader by reaching hundreds of people with cancer prevention, outreach, and education programs.

Stony Brook University Medical Center is able to offer such high quality care to the people of Long Island and beyond (patients travel from areas in New York, New Jersey, and Connecticut) because we have all the elements in place for comprehensive, state-of-the-art cancer care.

### **New and Upgraded Facilities**

Stony Brook's new center for outpatient cancer services was designed specifically for our model of patient and family centered care and team approach. Since it opened in early 2007, we have received positive feedback both from staff—who appreciate how the central location allows them to deliver efficient, coordinated, and comprehensive care, and patients—who applaud its comfort and convenience, all of which is reflected in our rising patient satisfaction scores. Located within the building is the Carol M. Baldwin Breast Care Center, the Center for Pain Management, and the outpatient Imaging Center with state-of-the-art equipment. The outpatient center also offers amenities such as valet parking and Internet access in waiting areas.

Medical Center facilities used by patients with cancer also have been upgraded and expanded, including radiation oncology; the inpatient oncology unit; the specialized bone marrow transplant unit; the Ambulatory Surgery Center; and the Hospital's operating rooms.

### **A Team Approach to Care**

To deliver the most comprehensive and optimal treatment possible, Stony Brook has developed Disease Management Teams, each one dedicated to treating a specific type of cancer. Teams are composed of surgeons, medical oncologists, diagnostic radiologists, radiation oncologists, pathologists, oncology nurses, and other cancer specialists. Members meet regularly to develop the best plan for each patient and to assess how well the treatment is working. Key is the amount of collaboration and communication among team members, as well as the oncology-trained nurses who serve as Patient Navigators, who schedule and coordinate services in a timely manner and facilitate team communication.

### **World-Class Physicians**

Stony Brook continually seeks out the most expert physicians,

many of whom have a national, even international, reputation. Recent recruits contributing to the cancer care team include:

- Rahuldev S. Bhalla, MD, Urologic Surgery and Director of Robotics and Minimally Invasive Surgery in the Department of Urology
- Roberto Bergamaschi, MD, Chief of General and Colorectal Surgery, who will focus his practice on laparoscopic and conventional surgery for colon and rectal cancer
- Juan R. Madariaga, MD, PhD, Professor of Surgery, Division of Surgical Oncology, who is a specialist in the treatment of primary and metastatic liver tumors, hepatobiliary surgery, liver resection, and excision of gallbladder and bile duct tumors and biliary strictures
- Adam Korzenko, MD, Department of Dermatology, who is establishing a new skin cancer clinic that will work in coordination with the melanoma clinic

### **Advanced Technology**

If there is state-of-the-art equipment with proven benefits available, chances are that Stony Brook University Medical Center has it. Our commitment to technology—from the most advanced planning, manage-

ment and positioning software to high-powered linear accelerators to high-definition imaging systems—is apparent in our long list of tools and equipment, which is unparalleled on Long Island.

Most recently, following the acquisition of the most advanced version of the da Vinci® S HD™ Surgical System, we have expanded our robot-assisted surgical program. This allows us to offer minimally invasive surgery—with its ensuing benefits of shorter recovery time, fewer complications, less trauma to surrounding tissue and, often, better clinical outcomes—to patients needing cancer surgery, for example prostatectomy and hysterectomy. Currently, we are the only hospital in Suffolk County with these capabilities and one of the few in the greater New York area.

### **A Focus on Education**

As an academic medical center, Stony Brook trains the next generation of physicians and medical professionals. Not only does this give us a constant infusion of young curious minds open to new ideas, it also attracts seasoned professionals dedicated to teaching these minds. The teaching environment fosters an atmosphere

focused on change, innovation, and questioning the status quo—all things that ultimately benefit our patients.

In conjunction with Stony Brook University, we offer residencies in 19 medical specialties, and 27 fellowships, including training of 9 medical hematology/oncology fellows, 3 surgical fellows, and 13 pediatric subspecialty fellows in the past year.

### Access to Research and Clinical Trials

When it comes to treating—and curing—cancer, research and clinical trials play a vital role.

The fact that Stony Brook's patients have access to a wide variety of clinical trials, innovative treatment protocols, and cutting-edge research studies enhances the value of our program and gives patients a better opportunity to connect with the optimal treatment. Our Clinical Trials Program has been restructured to support the disease management team approach and increase the ability to support clinical cancer research across multidisciplinary lines.

Some of the national studies we participate in include those supported by the American College of Surgeons Oncology Group, the National Adjuvant Breast

and Bowel Project, Cancer and Leukemia Group B, the Children's Oncology Group, National Cancer Institute, and National Institutes of Health. In 2007, our researchers participated in multiple research projects; at any given time, approximately 80 ongoing clinical trials are available to patients with different types of cancer.

### Ongoing Commitment to Quality

Stony Brook's cancer program was granted a full three-year approval by the American College of Surgeons (ACOS) as a teaching hospital cancer

program, and received commendations in six of nine possible areas, including outcome analysis, prevention and early detection programs, use of nationally recognized patient management guidelines, and clinical trials. Our Cytogenetics Lab received certification from the Children's Oncology Group for the analysis of chromosomal abnormalities in childhood leukemia—which recognizes our expanded capabilities in the molecular diagnosis of cancer. We are committed to becoming a National Cancer Institute-designated comprehensive cancer center, which will make us just one of 22 in the country with this designation, and the only one on Long Island.

## ABOUT STONY BROOK UNIVERSITY MEDICAL CENTER

Since it began providing care in 1980, the mission of Stony Brook University Medical Center has been unwavering:

- *improve the lives of patients, families, and communities*
- *educate skilled healthcare professionals*
- *conduct research that expands clinical knowledge*

**Tertiary Care.** Today, Stony Brook University Medical Center is the only tertiary hospital in Suffolk County and the only academic medical center on Long Island. With more than 6,800 employees, it is also the largest hospital in Suffolk County. Certified for 540 beds, the Hospital treats approximately 30,000 inpatients and 230,000 outpatients, as well as performs more than 18,000 surgical cases, annually.

**A Regional Resource.** As the only Level 1 Trauma Center in Suffolk County, Stony Brook is the regional referral center for trauma. We are also a regional referral center for stroke and stroke intervention, perinatal care and neonatal intensive care, burn care, ALS, pediatric and maternal HIV/AIDS, pediatric and adult multiple sclerosis, and comprehensive psychiatric emergency services.

**Community Commitment.** Highly committed to improving the health of its community, the Hospital established and funds the First Responder Program in eastern Long Island and provides nearly 1,000 education and health-related programs annually. Stony Brook recently began a patient and family centered care initiative that partners the patient/family unit with the medical

team with the goal of better outcomes, improved communication, more informed decision making, greater patient safety, and higher patient satisfaction. And, in fall 2008, the Hospital concluded Phase 1 of a Major Modernization Project, with an upgraded Emergency Department, new operating rooms, a new Women and Infants Center, and a new lobby.

**Education and Research.** The Medical Center continues to train medical professionals through the University's School of Medicine and the Health Sciences Schools—Dental Medicine, Health Technology and Management, Nursing, and Social Welfare. And on the research front, Stony Brook scientists participate in clinical trials, national studies, and community-based projects.

**Quality.** Overall, patient satisfaction and safety scores have steadily increased, and mortality rates have decreased hospital-wide for the past five years—one of the fastest declines in the nation. The Quality Assessment Review Board and the Patient Safety Council continue to help Stony Brook further improve clinical quality, processes, safety, and outcomes.

**Excellence.** The Hospital has been recognized for healthcare excellence by many external groups, including the Institute for Healthcare Improvement, the Healthcare Association of New York State, the National Research Corporation, the University HealthSystem Consortium, and the U.S. Department of Health and Human Services.

# A TEAM APPROACH TO CARE

WE DELIVER THE BEST CARE WITH THE BEST OUTCOMES—SOMETHING EXPECTED OF ANY QUALITY CANCER PROGRAM. HOW WE GO ABOUT ACHIEVING THAT GOAL IS WHAT DISTINGUISHES US FROM THE OTHERS. It's not enough to have expert physicians, state-of-the-art facilities, and the latest technology. The key is how these elements work together to provide optimal treatment for the patient.

That is why the Cancer Care Program at Stony Brook University Medical Center revolves around the concept of site-specific Disease Management Teams. These multidisciplinary teams provide a coordinated, comprehensive approach to cancer diagnosis, treatment, and follow-up.

Teams consist of varying combinations of oncologists with cancer subspecialties, surgeons, medical hematology/oncology physicians, radiation oncologists, pathologists, radiologists, researchers, registered nurses and nurse practitioners with specialized cancer training, therapists, social workers, and other medical professionals. In addition, the patient is assigned a Patient Navigator who facilitates scheduling, coordination of services, communication among team members, problem solving,

and matching patients to available clinical studies. Physicians on the teams also participate in ongoing Tumor Board meetings, in which each patient is presented for staging and treatment planning. (For more on Tumor Boards, see page 34.)

The multidisciplinary team approach starts as soon as a patient enters the program with a cancer diagnosis or suspected cancer. Based on the patient's diagnostic studies, staging, medical and family history, lifestyle, and other factors, an individualized management plan is put together. During treatment, the team confers frequently and updates the plan when warranted. The team follows the patient along the continuum of care, providing follow-up when needed, as well as providing educational materials, referrals to community

resources, and ongoing support groups. In addition, the Disease Management Teams take a role in community education, prevention measures, screenings, and early intervention.

Because the team is directly involved with all aspects of care, members often establish long-term relationships with patients. This provides superb continuity of care and helps avoid many of the potential problems associated with fragmented care.

One of the major advantages of the treatment approach of the Disease Management Teams at Stony Brook University Medical Center is access to basic research and clinical trials. In fact, many of the team members themselves may be involved in the research projects. This gives patients more treatment options, as well as access to the latest protocols and state-of-the-art interventions.

In addition, because Stony Brook has a pioneering minimally invasive surgery program and one of the most technologically advanced radiation oncology programs in the region, patient treatment regimens—whether surgery, radiation, or both—truly are state-of-the-art, with all the accompanying benefits. In the case of surgery, the

minimally invasive techniques, including leading-edge robot-assisted surgery, result in faster recovery times, fewer complications, less bleeding, and less trauma to the surgery site. In the case of radiation oncology, because of advanced positioning software and technology, patients receive a more highly targeted radiation dose with less damage to the surrounding tissues and organs. Medical oncology specialists work with surgeons and radiation oncologists to offer the most advanced options in systemic and targeted chemotherapy.

The teams also have developed quality dashboards with benchmarks that are continually reviewed for opportunities to improve patient care specific to their practice and interest, and develop new dashboard items measured against nationally established evidence-based benchmarks. An example is the Melanoma Management Team, which used the NCCN guidelines on margin excision, achieving a 100 percent target consistently between July and December 2007.

**Following are brief descriptions and highlights of each Disease Management Team at Stony Brook University Medical Center.**

## BREAST CANCER MANAGEMENT TEAM

### Overview

The only comprehensive academic program of its kind on Long Island, Stony Brook's fast-growing Breast Care Program treats more than 450 new patients with breast cancer annually with the most advanced treatment available. At the Carol M. Baldwin Breast Care Center, located in the new Cancer Center outpatient facility, breast imaging specialists perform more than 8,000 mammograms and 2,000 sonograms a year. The program also makes available a highly specialized genetic counselor for women who may have inheritable breast cancer. And, in conjunction with the Department of Physical Therapy, women have access to a comprehensive, highly specialized lymphedema evaluation and treatment program.

The Breast Care Center has been a pioneer in a number of ways, including being the first on Long Island to offer digital mammography and being one of only seven centers in the world equipped with a tomosynthesis machine. This experimental technology, which produces 3D mammogram images—ideal for women with dense breasts—is still in the testing stage. In addition, Stony Brook's breast cancer surgeons specialize in breast conservation surgery, and were the first on Long Island to offer the less invasive sentinel node biopsy, widely considered the biggest advance in breast cancer surgery in the past several years.



### Highlights

- **Stony Brook's breast surgeons and radiation oncologists are using the new mammosite radiation system**, which involves temporary implantation of a device into the lumpectomy cavity, which can then assist in delivering full lumpectomy radiation in five days instead of the traditional six weeks of external radiation to the entire breast. The department also provides partial breast radiation via 3D conformal radiotherapy given in a series of 10 treatments over five days. This can be used with select patients with left-side breast cancer, where minimizing radiation doses to the heart and lung is critical.

- **Oncologists are using standard and novel chemotherapy regimens**—as well as new combinations that can dramatically improve survival rates—with the goal of becoming the standard regimens of the future. The program can also connect patients with resistant tumors to phase II experimental agents.

- **Stony Brook participates in a wealth of clinical trials and basic research.** One study, called TAILORx Trial (Trial Assigning Individualized Options for Treatment), looks at genetic profiling of tumors to determine which patients need chemotherapy. Other basic research projects look to gain a greater understanding of the biology of the breast and developing leading-edge treatments.

### TEAM MEMBERS

**Surgery:** Brian O'Hea, MD, Team Leader and Director, Carol M. Baldwin Breast Care Center; Martyn Burk, MD; Patricia Farrelly, MD; Louis Merriam, MD; Colette Pameijer, MD; Trisha Fideli, RN; and Lynette LeePack-May, NP

**Breast Imaging:** Jayne M. Bernier, MD; Cliff Bernstein, MD; Sheri Ford, MD; and Roxanne Palermo, MD

**Medical Hematology/Oncology:** Andrzej Kudelka, MD; Janice Lu, MD; and Neetu Radhakrishnan, MD

**Pathology:** Jingxuan Liu, MD

**Plastic and Reconstructive Surgery:** Duc Bui, MD, and Sami Kahn, MD

**Radiation Oncology:** Allen G. Meek, MD, Chair, Department of Radiation Oncology, and Tae Park, MD



# GYNECOLOGIC ONCOLOGY MANAGEMENT TEAM

## Overview

The Gynecologic Oncology Management Team treats cancers of the ovary, uterus (endometrium), cervix, vulva, vagina, peritoneum, and fallopian tube using a three-pronged approach. One, the team provides comprehensive multidisciplinary care for women with known or suspected gynecologic cancers, as well as those with complicated gynecologic surgical and selected pre-invasive conditions. Two, the team conducts research into the development and treatment of these cancers. And three, they are committed to educating healthcare professionals and the public.

In 2007, there were 6,855 office visits and 1,497 new patients. In addition, Stony Brook was formally recognized by the Gynecologic Oncology Group (GOG), a national research organization funded by the National Institutes of Health to provide patients access to cutting-edge therapy, as one of the top three accruing sites for the preceding three years. Team members co-authored several GOG manuscripts, and 43 patients were enrolled in a GOG study. The team also has successfully met the requirements for a two-year educational grant from the New York State Department of Health for increasing awareness of ovarian cancer in primary care practitioners, the lay population, and in underserved Hispanic/Latino women—efforts that were repeated in a national collaboration, as well. An additional grant will focus on the middle school population.

The team provides comprehensive multidisciplinary care for women with known or suspected gynecologic cancers.

## Highlights

● **Surgical procedures performed include** radical pelvic and exenterative, gastro-intestinal, urological, robot-assisted minimally invasive hysterectomy, and reconstructive plastic surgery. The team treated 1,012 cases in 2007, 649 which were classified as major, 363 as minor.

● **The team, which includes physicians, a clinical pharmacist, and chemotherapy-certified nurses, is experienced** in administering intravenous, oral, and intraperitoneal chemotherapy, and in 2007, administered 1,525 chemotherapy cycles. A weekly treatment planning conference, attended by the members of the chemotherapy team, reviews all active patients.

● **In conjunction with the Department of Radiation Oncology, the team develops treatment plans,** places brachytherapy devices, and administers intraperitoneal radioisotopes.

● **Ongoing clinical trials include evaluation of the role of chemotherapy** following radiation in women with advanced cervical cancer, assessing patients' end-of-life preferences,

## TEAM MEMBERS

**Surgery and Chemotherapy:** Michael Pearl, MD, Team Leader, Director, Division of Gynecologic Oncology; Ann Buhl, MD; Eva Chalas, MD; Kent Chan, MD; Jeannine Vilella, DO; and Judy McDonough, Gynecology Administration

**Medical Hematology/Oncology:** Andrzej Kudelka, MD

**Pathology:** Sharon Liang, MD, PhD, and Carmen Tornos, MD

**Radiation Oncology:** Tamara Weiss, MD

and several industry-sponsored phase II chemotherapy trials for patients with ovarian or cervical cancer. In collaboration with the Division of Medical Oncology, scientists are working to develop a method to isolate viable ovarian cancer cells and identify early ovarian cancer antigens via DNA microassay. With the Department of Surgery, scientists are investigating the association between obesity, inflammation, and cancer. Several other research projects are attempting to identify genes that play a role in ovarian cancer as well as to validate a new screening blood test.

## UROLOGIC ONCOLOGY MANAGEMENT TEAM

### Overview

The Urologic Oncology Management Team provides comprehensive care for all genitourinary malignancies, including cancers of the prostate, urinary bladder, adult kidney, and testis. Care ranges from screening at-risk individuals to treating those with advanced disease and providing access to clinical trials for patients with malignant tumors. In 2007, Stony Brook's Department of Urology was ranked among the top 50 in the nation by *U.S. News & World Report* (July 23, 2007). Also in 2007, the Hospital became the first in Suffolk County to acquire the da Vinci® S HD™ Surgical System, the most technically advanced robot system available. To develop the robotics program in urology, Stony Brook recruited Rahuldev S. Bhalla, MD, a nationally recognized robotic surgeon who has performed and supervised more than 290 robot-assisted surgeries and continues to investigate new techniques and instrumentation. Community education is also an important focus of the team. In 2007, the outreach team provided approximately 1,300 free prostate screenings to men across Long Island, with a special focus on the high-risk groups in the African American and Hispanic communities.

#### TEAM MEMBERS

**Surgery:** Wayne Waltzer, MD, Team Leader and Chair, Department of Urology; Howard L. Adler, MD, Director of the Prostate Care Program; Rahuldev S. Bhalla, MD, Director of Robotics and Minimally Invasive Surgery; Christopher S. Lee, MD, Team Leader, Director, GU Cancer Vaccine Program and Clinical Trials; Melanie Dale, RN, Patient Navigator; Kathy Kelly Lyons, NP; Jeanne Martin, NP; Arlene Shaw, RN; and Matthew Petersen, PA

**Medical Hematology/Oncology:** Shenhong Wu, MD, PhD

**Pathology:** Jingxuan Liu, MD

**Radiation Oncology:** Tae Park, MD

**Radiology:** Marlene Zawin, MD

Stony Brook became the first hospital in Suffolk County to acquire the da Vinci® S HD™ Surgical System, the most technically advanced robot system available.

### Highlights

● **As a leader in prostate cancer treatment, options available at Stony Brook include** robot-assisted surgery; open or laparoscopic surgery; radiation therapy with external beam and/or radiation seed implants; cryotherapy; hormonal therapy; and investigational therapies.

● **Bladder cancer treatments include local surgical resection and placement of chemotherapeutic agents into the bladder.** Robotic surgery may also be an option for appropriate candidates who require removal of the bladder (cystectomy). Some may be candidates for creation of a new continent bladder made from the intestine. During diagnostic cystoscopic surgeries, the team uses the leading-edge Optical Coherence Tomography (OCT) technology to help diagnose and stage bladder cancers earlier.

● **For adult kidney cancer treatment, the team provides open and laparoscopic radical nephrectomy and partial nephrectomy.** Patients with advanced disease can receive immunotherapy with cytokines, such as interleukin-2, and other agents. In addition, new oral agents such as sunitinib and sorafenib that target vascular endothelial

growth factor receptors are available to patients with advanced disease.

● **The Urologic Oncology Management Team participates in a number of clinical trials and basic research** including investigating novel agents such as abiraterone, axitinib, and larotaxel; optimizing treatment with new agents currently being used in clinical practice; identifying tumor-associated antigens that “shed” from tumors in order to develop vaccines; identifying cancer markers in the urine; and investigating the role of environmental toxins, specifically diesel fuels, in bladder cancer. In addition, Dr. Christopher S. Lee, in collaboration with Senior Immunologist Dr. Sandra Reynolds, is working to develop vaccines against urologic cancers to be used in patients undergoing hormonal therapy for prostate cancer. Dr. Victor Romanov, Research Assistant in the Department of Urology, has identified the specificity of endothelium target organs as the explanation for the frequency of metastases to particular sites—presenting his findings at an international meeting in St. Petersburg, Russia.

# PROSTATE CANCER SITE-SPECIFIC SUMMARY

Prostate cancer is the most common primary cancer site seen in men in the United States and the second most common cause of cancer death in men, according to the American Cancer Society (ACS) surveillance research statistics. The ACS estimates that 186,320 new cases of prostate cancer will be diagnosed in the U.S. in 2008, 10,500 of those patients in New York State. The ACS has lowered its estimated mortality rates for prostate cancer patients based on declining national mortality statistics, estimating that 28,660 men are expected to die with prostate cancer in 2008, compared to 31,500 in 2001. Incidence rates for prostate cancer are significantly higher in African American men than in white men, according to published studies.

With greater public awareness, early detection is on the rise. Early stage prostate cancer usually has no symptoms. The American Cancer Society recommends that the PSA blood test and digital rectal examination be offered to men at average risk for developing prostate cancer beginning at age 50. PSA screening may identify clinically significant prostate cancer and may lead to fewer cases of metastatic disease at initial diagnosis. Symptoms of more advanced disease are dysuria, hematuria, and bone pain, although these are not specific to prostate cancer. Treatment options and prognosis vary depending on age, stage, Gleason score, and other medical conditions and should be discussed with the individual's physician.

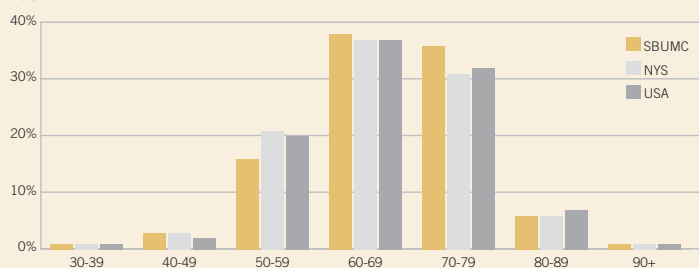
In 2007, 215 new patients with prostate cancer were seen at Stony Brook University Medical Center; 134 of them received all or part of their initial treatment here, and 81 were seen for retreatment or recurrence. Age group, race, and stage at diagnosis for 720 newly diagnosed patients at Stony Brook University Medical Center in 2003 through 2007 compared favorably with National Cancer Data Base (NCDB) benchmark data. Greater than 90% of our patients at Stony Brook were diagnosed at Stage II compared to less than 80% of patients nationwide. Our survival outcomes for this group compared favorably with NCDB survival data for Stage II prostate cancer with an 88.3% survival rate at Stony Brook compared to an 87.7% survival rate nationwide for patients diagnosed in 1998 through 2000. The number of cases accrued at Stony Brook in Stage groups I, III, and IV for this period was small.

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## AGE AT DIAGNOSIS

### Prostate Cancer

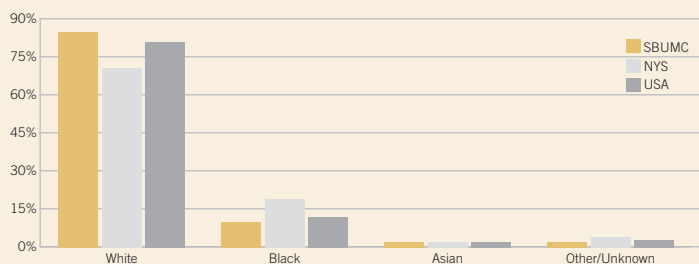
720 cases from 2003-2007 at SBUMC vs. NCDB Benchmark Data for 51,029 cases in New York State vs. 768,835 cases in the USA



## RACE

### Prostate Cancer

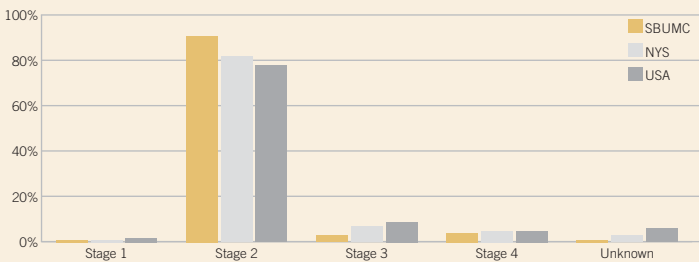
Comparing SBUMC to NCDB Benchmark Data for New York State and USA



## STAGE AT DIAGNOSIS

### Prostate Cancer

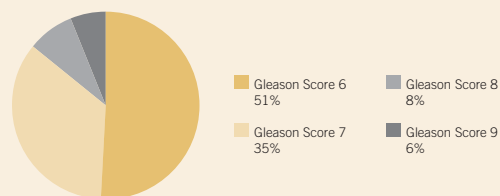
Comparing SBUMC to NCDB Benchmark Data for New York State and USA



## GLEASON SCORE

### Prostate Cancer

163 cases at SBUMC in 2007



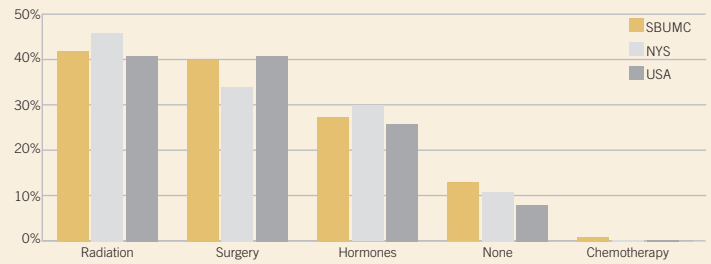
Modalities utilized in 2007, alone or in combination, for first course of treatment: 40% were treated with surgery, 43% received radiation therapy, 28% received hormone therapy, 2% received chemotherapy, and 13% had either no cancer-directed treatment or “watchful waiting.” Radiation therapy modalities utilized at Stony Brook included conformal, intensity modulated external beam radiation and seed implants. Surgical options included radical open prostatectomy and laparoscopic prostatectomy. New advances in medical technology available at Stony Brook University Medical Center have expanded surgical treatment options to include robot-assisted prostatectomy that may improve cancer control and reduce side effects of treatment.

Survey prepared by Vincine Kelly, CTR, Cancer Registry, with Tae Park, MD, Radiation Oncology, and Howard L. Adler, MD, Urology.

**TREATMENT MODALITIES**

**Prostate Cancer**

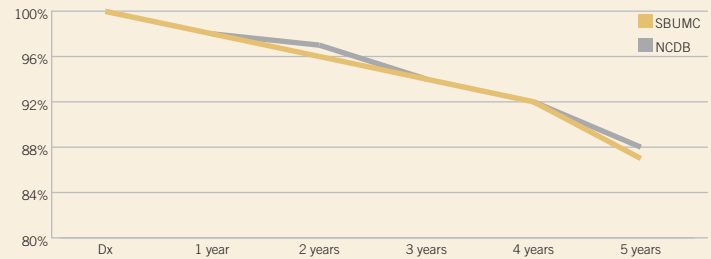
Comparing SBUMC in 2007 vs. NCDB Benchmark Data for NY State and USA



**5-YEAR SURVIVAL**

**Prostate Cancer Stage 2**

Comparing observed survival on patients' diagnoses 1998-2000 for 326 cases at SBUMC vs. 268,174 NCDB cases nationwide



# MELANOMA MANAGEMENT TEAM

## Overview

The Melanoma Management Team is dedicated to the comprehensive management of patients with the deadliest form of skin cancer, melanoma. This includes education, community awareness, screening, and access to clinical trials. Most patients are first evaluated through the Department of Dermatology. In 2007, 12,282 outpatients were seen. Some patients with early melanoma can be managed exclusively through the Department of Dermatology. Those needing lymph-node sampling or skin grafting are evaluated by the Department of Surgical Oncology. More than 90 percent of patients with melanoma are treated with surgery alone. Patients with advanced or recurrent disease have their cases reviewed at the Tumor Board meeting to establish optimum treatment. All of our patients are entered into a melanoma database, which tracks patient population and outcomes. Patient population remains high, with 127 patients seen last year. The average annual incidence of melanoma in Suffolk County is 158 cases per year, which makes Stony Brook the major melanoma treatment center on Long Island.

### TEAM MEMBERS

**Surgical Oncology:** Colette Pameijer, MD, Team Leader; Claire Smith, RN, Patient Navigator; and Patricia Pugliani, PhD, Research Administration

**Dermatology:** Evan Jones, MD, Chair, Department of Dermatology; Peter Klein, MD; Adam Korzenko, MD; and Deborah Deierlein, NP

**Medical Hematology/Oncology:** Andrzej Kudelka, MD

**Pathology:** Frederick Miller, MD

**Radiation Oncology:** Edward Valentine, MD

**Radiology:** Corazon Cabahug, MD, and Elaine Gould, MD

## Highlights

### ● The team works to have clinical trials available to all patients.

Some are national (for example, ECOG, typically for patients with metastatic or advanced disease) and others are Stony Brook's own. Currently, Stony Brook has high accrual rates into its ongoing psychosocial and tumor profiling studies.

### ● The Melanoma Team includes

dermatologists, surgical oncologists, medical oncologists, radiation oncologists, pathologists, Patient Navigators, nurse practitioners, and a data manager.

### ● Stony Brook has begun isolated limb infusion for recurrent melanoma that is limited to an extremity.

In this procedure, the arm or leg with the recurrent melanoma is isolated from the rest of the body by a tight tourniquet. Catheters are inserted in the main artery and vein to that extremity and warm chemotherapy is circulated. While not a cure, it can control the disease for a period of time.

### ● The team has established a tissue bank of melanoma specimens.

This detailed information will be combined with the clinical database to help establish new guidelines for treatment and risk of recurrence. And to ensure continuity of care, the team has created a patient network database with information on visits and dates of skin examinations and screenings, which is available to all members of the Melanoma Management Team.

### ● The team held its third annual skin screening at the Cancer Center.

Of the 280 attendees, 196 between ages 17 and 100 were screened. Other outreach initiatives included high school health education classes and participation in the Hospital's Health Expo.

● **With the addition of Adam Korzenko, MD**, the Department of Dermatology is establishing a skin cancer clinic at the Cancer Center, which will be coordinated with the melanoma clinic.

Some patients with early melanoma can be managed exclusively through the Department of Dermatology.

# LUNG CANCER MANAGEMENT TEAM

## Overview

The Disease Management Team at the Lung Cancer Evaluation Center (LCEC) provides comprehensive programs to diagnose and treat patients with lung cancer. As lung cancer is the leading cause of cancer death in the U.S., Stony Brook has invested considerable resources in early detection, risk assessment by markers, non-invasive staging, and combined modality therapeutic approaches. This provides more accurate staging before surgery and allows promising new advances, such as neoadjuvant chemotherapy prior to resection.

## Highlights

● **Some of the state-of-the-art technology used at the LCEC** includes radiofrequency ablation; image-guided radiotherapy; PET/CT fusion imaging scanning; interventional bronchoscopy; stenting; trans-bronchial needle aspiration for nonsurgical diagnosis and staging with onsite pathology, cautery, laser, and brachy-therapy.

● **Thoracic surgery remains the preferred treatment for curative intent**, and procedures performed include pneumo-nectomy, lobectomy, VATS lobectomy, wedge resection, thoracoscopy, and medi-astinoscopy.

● **The mortality associated with procedures performed at Stony Brook has been consistently lower than the reported national average of three to five percent.**

● **Patients can participate in ongoing protocols in every phase of diagnosis and treatment**, including national studies through the Eastern Cooperative Oncology Group and the American College of Surgeons Oncology Group.



### TEAM MEMBERS

**Pulmonary Medicine:** Daniel Baram, MD, Team Leader and Co-Director, Lung Cancer Evaluation Center

**Surgery:** Thomas V. Bilfinger, MD, Chief, Thoracic Surgery, and Co-Director, Lung Cancer Evaluation Center

**Nursing:** Eileen Zaoutis, RN, LCEC Nurse Coordinator; Sunday Campolo-Athans, NP; April Plank, NP; and Maureen Farell, LCEC Administration

**Medical Hematology/Oncology:** Theodore G. Gabig, MD, and Roger Keresztes, MD

**Pathology:** Philip Kane, MD

**Radiation Oncology:** Bong Kim, MD

**Radiology:** William Moore, MD

# LUNG CANCER SITE-SPECIFIC SUMMARY

Lung cancer accounts for approximately 15% of cancer diagnoses. It is the second most common primary cancer diagnosis in both men and women, and lung cancer accounts for the most cancer-related deaths for each. According to the American Cancer Society’s 2008 incidence and mortality rate estimates, although lung cancer diagnosis rates have been declining in men since 1984, rates in women rose from 1984 through 2004 in the United States, and are currently at a plateau.

Cigarette smoking is recognized as the most significant risk factor for lung cancer. Other factors include occupational or environmental exposures to secondhand smoke, radon, asbestos, and other chemicals, as well as genetic factors. Recent research has demonstrated that people with variations in particular genes are more likely to become addicted to smoking if they start smoking during adolescence, a time when peer pressure is also a significant factor. In 2007 and 2008, Stony Brook University Medical Center faculty stepped up efforts to prevent teens from smoking with outreach at local health fairs and by providing prevention education in area schools.

Effective screening methods for early detection of lung cancer are currently being studied. To date, there is not yet data to support screening, even in high-risk populations such as smokers. Stony Brook University Medical Center has participated as one of the largest contributors in the multi-institutional International Early Lung Cancer Program (I-ELCAP), which is evaluating the benefit of CT screening for lung cancer.

Stony Brook University Medical Center offers state-of-the-art imaging, specialized bronchoscopic techniques for non-operative staging and diagnosis, established treatment algorithms for abnormalities detected on screening imaging, minimally invasive surgical techniques, and targeted radiation strategies. Our Lung Cancer Evaluation Center is a dedicated center of expertise, where patients with known or suspected lung malignancies have access to all of the specialists involved in a coordinated, multidisciplinary setting.

Lung cancer is classified according to the histologic cell type as small cell and the more frequently encountered non-small cell. Therapy for these two types of cancer differ. Small-cell carcinoma is treated primarily with chemotherapy often combined with radiation therapy. Non-small cell carcinoma is approached with surgical resection as the cornerstone for curative therapy in early stage disease. Radiation and chemotherapy are utilized in later stages.

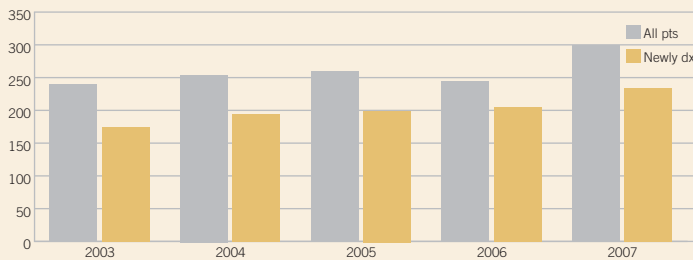
Multimodality therapy, or combination therapy, is often used for patients who are locally advanced.

Special expertise has been developed at Stony Brook for treating patients who have early-stage lung cancer but are not surgically treatable due to co-existing medical conditions such as emphysema or heart disease. Ablative therapies such as radiofrequency ablation, cryotherapy, and stereotactic radiation offer these patients new options. These modalities are being actively pursued at Stony Brook with results that are gaining national attention.

Since most lung cancers are found at an advanced stage, treatment of symptoms and complications become an important aspect in our cancer program. It is possible to extend survival and improve quality of life. This takes on many facets. Our therapeutic bronchoscopy program has grown, making Stony Brook University Medical Center regional leader, able to offer all aspects of complex airway management for patients who develop tracheobronchial obstruction or bleeding including laser therapy, airway stents, and endobronchial brachytherapy. Another treatable case of shortness of  
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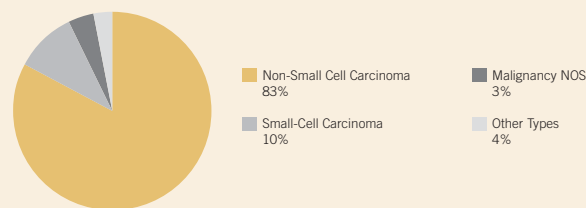
**PATIENT VOLUME**  
**Lung Cancer**

5-year trend in patients diagnosed with lung cancer seen at SBUMC 2003-2007



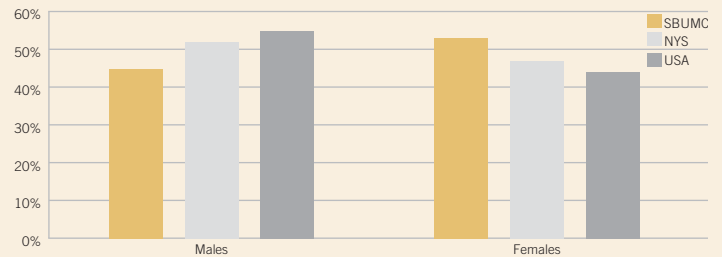
**HISTOLOGY**  
**Lung Cancer**

1,002 cases at SBUMC 2003-2007



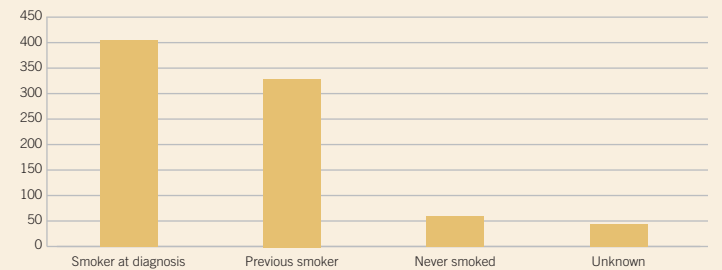
**GENDER INCIDENCE**  
**Non-Small Cell Lung Cancer**

840 patients at SBUMC 2003-2007 vs. NCDB Benchmark Data on 6,520 in New York State and 111,109 in the USA



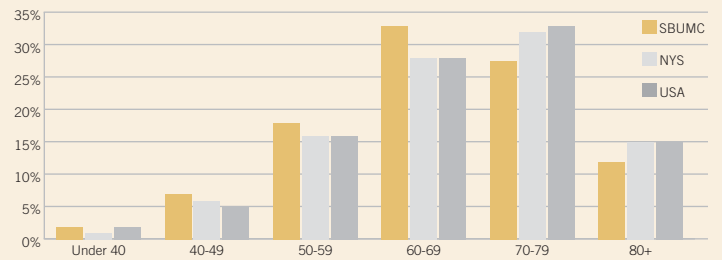
**SMOKING HISTORY**  
**Non-Small Cell Lung Cancer**

840 patients at SBUMC 2003-2007



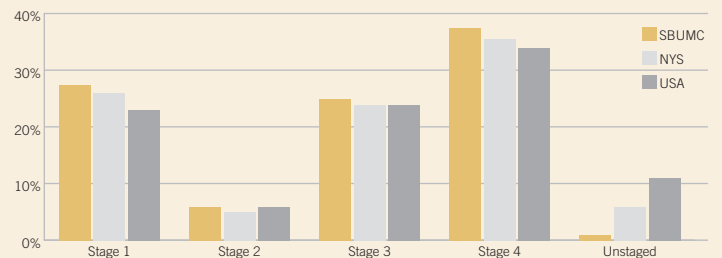
**AGE AT DIAGNOSIS**  
**Non-Small Cell Lung Cancer**

840 analytic cases at SBUMC 2003-2007 vs. NCDB Benchmark Data on 6,520 in New York State and 111,109 in the USA



**STAGE AT DIAGNOSIS**  
**Non-Small Cell Lung Cancer**

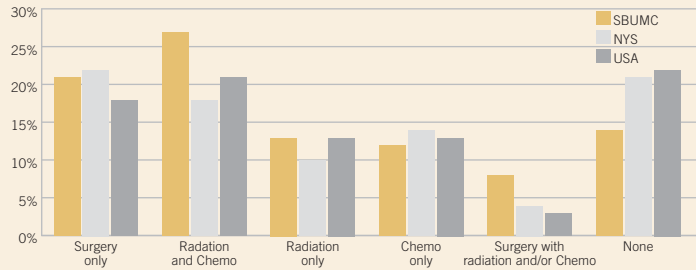
840 analytic cases at SBUMC 2003-2007 vs. NCDB Benchmark Data on 6,520 in New York State and 111,109 in the USA



**TREATMENT**

**Non-Small Cell Lung Cancer**

840 patients at SBUMC 2003-2007 vs. NCDB Benchmark Data on 6,520 in New York State and 111,109 in the USA



**5-YEAR SURVIVAL**

**Non-Small Cell Lung Cancer by Stage Group**

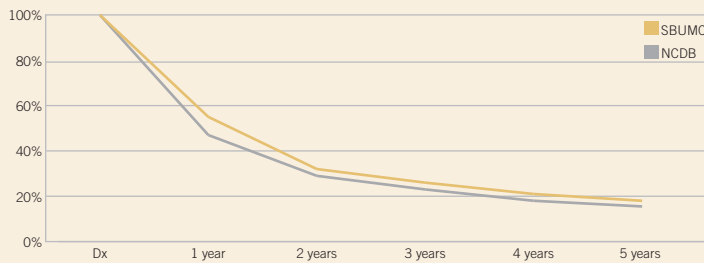
Comparing observed survival on 470 cases at SBUMC vs. 333,657 cases in the NCDB 1998-2000

| 1998 thru 2000           | Stage 1           | Stage 2           | Stage 3          | Stage 4          |
|--------------------------|-------------------|-------------------|------------------|------------------|
| <b>SBUMC</b><br>n=470    | 41.2%<br>n=65     | 25.77%<br>n=97    | 13.35%<br>n=131  | 4.2%<br>n=177    |
| <b>NCDB</b><br>n=333,567 | 42.5%<br>n=49,273 | 23.4%<br>n=18,549 | 8.4%<br>n=59,050 | 2.0%<br>n=75,987 |

**5-YEAR SURVIVAL**

**Non-Small Cell Lung Cancer ALL STAGES**

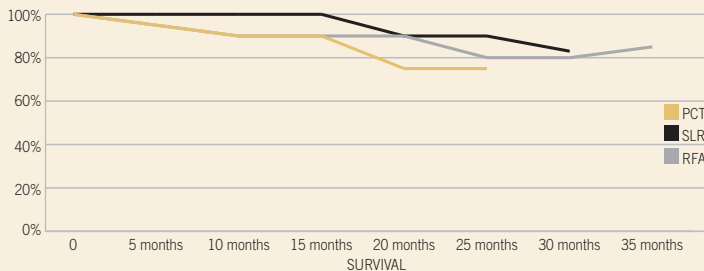
Comparing observed survival on patients diagnosed 1998-2000 for 351 cases at SBUMC vs. 203,560 NCDB cases nationwide



**OUTCOMES OF SPECIFIC TREATMENT MODALITIES**

**Lung Cancer**

Comparing sublobar resection (SLR) to radiofrequency ablation (RFA) and pulmonary cryotherapy (PCT) at SBUMC



breath in lung cancer patients is accumulation of pleural fluid around the lung; this can be treated with outpatient drainage. Airway and pleural therapies can dramatically improve breathing and minimize the number of days spent in the hospital.

An outcomes-focused study of lung cancer at Stony Brook University Medical Center from 2003 to 2007 showed 1,002 new patient encounters with an initial diagnosis and treatment. Eighty-three percent, or 840, were diagnosed with non-small cell lung cancer (NSCLC), 10% with small-cell carcinoma, and 7% with other histologic type malignancies. For the non-small cell lung cancer patient cohort, gender, age, and stage group at diagnosis and treatment were compared to National Cancer Data Base data for New York State and all states. Stony Brook patients were shown to be more frequently female and younger than demonstrated by the state and national benchmarks. Staging was in line with national data. Treatment trends reflect the multidisciplinary services available at Stony Brook. Five-year survival rates are daunting nationwide. Stony Brook exceeded the 15% national outcomes benchmark data, and compared favorably for every stage.

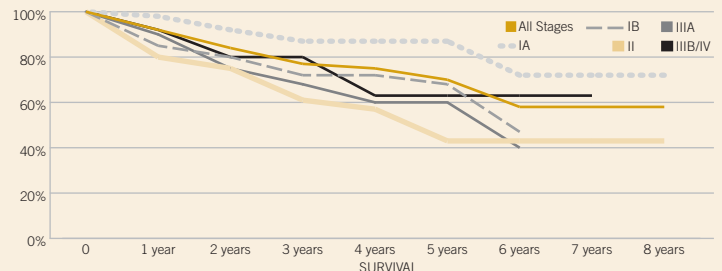
New and exciting advances in diagnosis, staging, and treatment of lung cancer make it more important than ever that patients be evaluated by dedicated specialists to ensure they are receiving the most up-to-date and best therapies available. Stony Brook offers a multidisciplinary approach to make this possible.

Summary prepared by Vencine Kelly, CTR, Cancer Registry, with Daniel Baram, MD, and Thomas Bilfinger, MD, Lung Cancer Evaluation Center.

**SURVIVAL OF SURGICALLY RESECTED LUNG CANCER BY STAGE**

**Lung Cancer**

Percent survival at stages as of July 2008 SBUMC





## UPPER GI ONCOLOGY MANAGEMENT TEAM

### Overview

The Upper Gastrointestinal (GI) Oncology Management Team focuses on the diagnosis and management of cancers or potential cancers of the esophagus, stomach, pancreas, bile ducts, small intestine, and liver. The multidisciplinary team involves physicians, who deliver direct care, and ancillary support staff, who ensure patients achieve the maximum benefit from their therapies.

### Highlights

- **The team strives to provide state-of-the-art diagnostics** and works to build programs for the early recognition of tumors and other abnormal conditions of the upper gastrointestinal tract.

- **A critical step in the management of upper GI cancers is accurate staging**, which allows the team to distinguish patients with operable and inoperable disease. This may be done via endoscopic ultrasonography, computerized axial tomography (CAT) scan, and positron emission tomography (PET) scanning.

- **Surgery is the mainstay of therapy and is curative in 25 to 40 percent of highly selected patients** who develop resectable metastases in the liver and lung. Improved surgical techniques are utilized by Stony Brook's experienced surgical specialists.

- **If the disease cannot be eradicated, the team strives to palliate the patient's symptoms and improve the quality of life.** The team actively tracks the quality of life of cancer survivors to continually update the approach used with this group of patients.

#### TEAM MEMBERS

**Surgery:** Kevin Watkins, MD, Team Leader; Juan Madariaga, MD; Michael Paccione, MD; Donna Keehner-Nowack, RN; Barbara Smith, NP; and Patty Zipoli, RN, Patient Navigator

**Gastrointestinal Medicine:** Douglas Brand, MD; Chris Lascarides, MD; Ramona Rajapakse, MD; Robert Richards, MD; and Isabelle Von Althen-Dagum, MD

**Medical Hematology/Oncology:** Roger Keresztes, MD, and Marisa Siebel, MD

**Pathology:** Galina Botchkina, MD; Bernard Lane, MD; and Sui Zee, MD

**Radiation Oncology:** Bong Kim, MD  
**Radiology:** Seth O. Mankes, MD

## LOWER GI ONCOLOGY MANAGEMENT TEAM

### Overview

The Lower Gastrointestinal (GI) Management Team evaluates and manages treatment of patients with colon and rectal cancers. It places an emphasis on early screenings, particularly in high-risk groups and adheres to National Quality Foundation guidelines for assessment of quality care.

### Highlights

- **The team uses new and powerful imaging technologies** that help surgeons remove disease and spare vital tissue, including endorectal ultrasound, magnifying endoscope, and minimally invasive laparoscopic surgical techniques.

- **Patients with Stage II colon cancer can participate in clinical trials** in which either surgery alone or 5-FU/leucovorin are used.

- **Patients with rectal cancer undergo staging** via endorectal ultrasound and PET/CT scan or endocoil MR imaging. Treatment consists of combined chemotherapy and radiation.

- **The team is currently using a pioneering approach on tumors—typically difficult to treat—that have spread to the abdominal cavity** from primary colorectal

#### TEAM MEMBERS

**Surgery:** Marvin L. Corman, MD, Team Leader; Roberto Bergamaschi, MD, Chief of General and Colorectal Surgery; Colette Pameijer, MD; William B. Smithy, MD; Donna Keehner-Nowak, RN; Nancy Petrone, RN; and Barbara Smith, NP

**Enterostomal Therapy:** Karen E. Chmiel, RN, and Susan Guschel, RN

**Gastrointestinal Medicine:** Douglas Brand, MD; Chris Lascarides, MD; Ramona Rajapakse, MD; Robert Richards, MD; and Isabelle Von Althen-Dagum, MD

**Medical Hematology/Oncology:** Marisa Siebel, MD and Shenhong Wu, MD, PhD

**Pathology:** Sui Zee, MD

**Radiation Oncology:** Bong Kim, MD

**Radiology:** Seth O. Mankes, MD

cancer, gastric cancer, appendiceal cancer, or mesothelioma. Called HIPEC (heated intra-peritoneal chemotherapy), the procedure is designed to kill any remaining cancer cells after the bulk of the abdominal tumor is removed. This gives patients as high as a 60 percent five-year survival rate. Stony Brook is the only hospital in Suffolk County offering the procedure.

# THYROID, HEAD AND NECK ONCOLOGY MANAGEMENT TEAM

## Overview

This management team is dedicated to the care of cancers in the head and neck region, including malignancies of the thyroid gland; the salivary glands; and the aerodigestive tract, which includes oral cavity, pharynx, larynx, nasal cavity, nasopharynx, and sinuses. It focuses on multidisciplinary team consultation with surgeons, radiation oncologists, medical oncologists, pathologists, and, in the case of thyroid cancer, endocrinologists. Thyroid cancers are highly curable with appropriate staging and treatment. For primary head and neck cancers, the two major goals are controlling the disease and maintaining a good quality of life.

## Highlights

● **Patient treatment plans can include advanced radiation therapy modalities** using external beam, radioiodine, and Thyrogen®.

● **One of the most recent advances in the surgical treatment of thyroid cancer available to our patients** is minimally invasive video-assisted thyroidectomy (MIVAT), which uses much smaller incisions than the traditional thyroidectomy and results in smaller scars and less post-operative pain.

● **For early stage head and neck cancer, the teams may utilize single modality treatment,** for example surgery, endoscopic laser, or radiation. These have the benefit of shorter hospital stays and good functional outcomes. Later Stage III and some Stage IV cancers are

typically treated with chemotherapy and radiation.

● **The team also provides reconstruction of surgical defects after cancer removal** to restore both functionality and aesthetics in the head and neck area.

## TEAM MEMBERS

**Surgery:** Ghassan Samara, MD, and Frances Tanzella, NP

**Medical Hematology/Oncology:** Roger Keresztes, MD, and Andrzej Kudelka, MD

**Endocrinology:** Harold Carlson, MD; Marie Gelato, MD; and Harmeet Narula, MD

**Pathology:** Alan Heimann, MD

**Radiation Oncology:** Edward Valentine, MD, and Tamara Weiss, MD

**Radiology:** Corazon Cabahug, MD; Dinko Francheschi, MD; and Robert Matthews, MD

# THYROID CANCER SITE-SPECIFIC SUMMARY

The National Cancer Institute estimates 37,340 new cases of thyroid cancer will be diagnosed in the United States in 2008, and 1,590 deaths will be attributed to it. Thyroid cancer occurs more commonly in female patients, with a 4 to 1 ratio nationwide. The majority of patient age group at diagnosis is the fourth and fifth decades, although it may occur in all adult age groups. Early stage thyroid cancer is usually diagnosed by palpation of a neck nodule. Fine needle aspirate or surgical excision usually determines the diagnosis.

Treatment for thyroid cancer at Stony Brook University Medical Center is determined by a team of specialists, including a diagnostic radiologist, surgeon, endocrinologist, radiation oncologist, and medical oncologist, and depends on the histologic cell type, size of the tumor nodule, patient's age, and stage at diagnosis. The prognosis is generally excellent when detected early and treated appropriately. Primary treatment modalities include surgical thyroidectomy, lymph-node dissection, radioactive iodine therapy, external beam radiation therapy, Thyrogen®, and systemic therapy with hormones and chemotherapy.

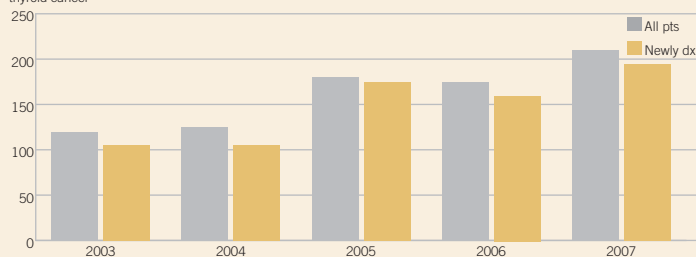
The majority of patients seen at Stony Brook between 2003 and 2007 were in the early stages of disease and received surgical resection, followed by adjuvant treatment with radioactive iodine, a type of radiation usually administered orally, and endocrine hormone therapy. Use of total thyroidectomy versus thyroid lobectomy in patients with thyroid cancer greater than one centimeter in size has improved survival. Cure rates for early stage thyroid cancer have increased from 80% in the 1960s to greater than 90% today. This can be attributed to early detection of thyroid nodules, advances in timing and type of surgical procedures, and the increased use of radioactive iodine (131-I), and the ability to use it at higher doses. Advances in radioiodine administration, including the ability to administer this treatment on an outpatient basis, has improved patient satisfaction and compliance. The use of Thyrogen® as the method of patient preparation for treatment instead of taking the patient off all thyroid hormones, which subsequently leaves them hypothyroid and symptomatic, has improved the patient's quality of life during treatment.

Summary prepared by Vencine Kelly, CTR, Cancer Registry, with Tamara Weiss, MD, Radiation Oncology.

**INCIDENCE BY YEAR**

**Thyroid Cancer**

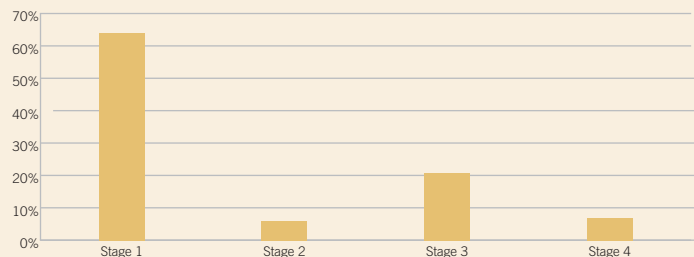
All thyroid cancer patients first seen at SBUMC in 2003 through 2007 vs. those first seen with a new diagnosis of thyroid cancer



**STAGE AT DIAGNOSIS**

**Thyroid Cancer**

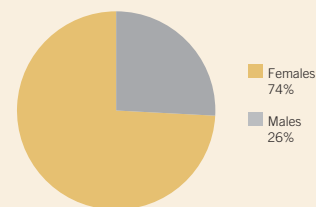
748 newly diagnosed patients first seen at SBUMC 2003-2007



**GENDER INCIDENCE**

**Thyroid Cancer**

840 patients first seen for thyroid cancer at SBUMC in 2003 through 2007



**TREATMENT MODALITIES**

**Thyroid Cancer**

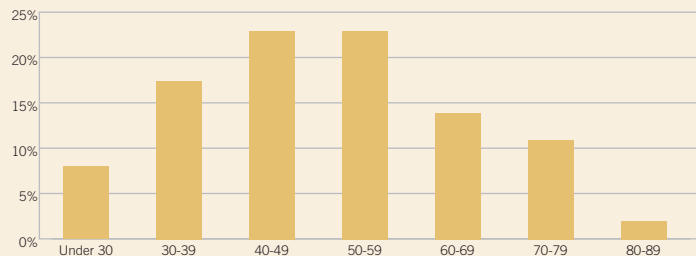
748 newly diagnosed patients treated at SBUMC 2003-2007

- Complete surgical thyroidectomy
- Partial surgical thyroidectomy
- Lymph-node dissection
- Radioactive iodine
- External beam radiation therapy
- Thyrogen®
- Endocrine hormone therapy
- Chemotherapy

**AGE AT DIAGNOSIS**

**Thyroid Cancer**

840 cases first seen at SBUMC 2003-2007, all patients including newly diagnosed and those for retreatment



**5-YEAR SURVIVAL**

**Thyroid Cancer by TNM Stage Group**

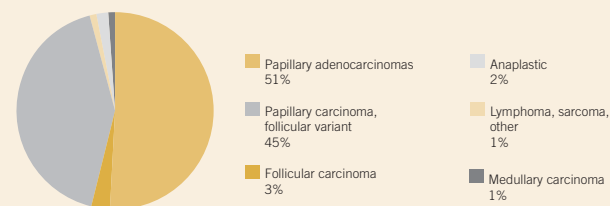
Comparing observed survival for patients diagnosed 1998-2000 for 218 analytic cases at SBUMC and 203,560 cases from the NCDB nationwide

| 1998 thru 2000          | Stage 1           | Stage 2          | Stage 3          | Stage 4          |
|-------------------------|-------------------|------------------|------------------|------------------|
| <b>SBUMC</b><br>n=218   | 95.99%<br>n=132   | 89.28%<br>n=58   | 75.70%<br>n=25   | 33%<br>n=3       |
| <b>NCDB</b><br>n=36,223 | 97.9%<br>n=21,422 | 94.0%<br>n=8,248 | 85.4%<br>n=4,964 | 30.3%<br>n=1,589 |

**HISTOLOGY**

**Thyroid Cancer**

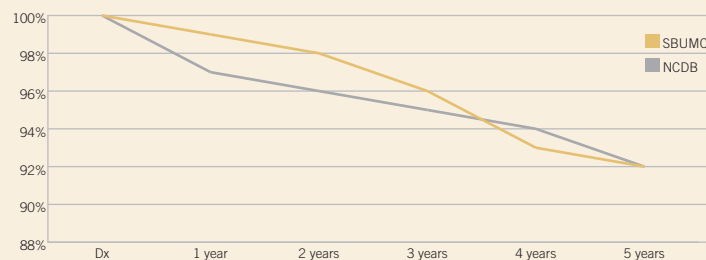
748 newly diagnosed patients first seen at SBUMC 2003-2007



**5-YEAR SURVIVAL**

**Thyroid Cancer All Stages**

Comparing patients diagnosed 1998-2000 for 218 analytic cases at SBUMC and 203,560 cases from the NCDB nationwide



## NEUROLOGIC ONCOLOGY MANAGEMENT TEAM

### Overview

The Neurologic Oncology Management Team, created to better respond to the needs of patients receiving treatment for tumors involving the central nervous system, brain, and spine, provides tertiary management of benign and malignant tumors. The team provides interdisciplinary consultation, advanced diagnostic methods, and treatment planning.

### Highlights

- **Working with the Department of Radiology, the team uses advanced imaging technology for diagnosis** including high-field MRI, MR angiography, MRI spectroscopy, diffusion with MRI, CT scanners with CT angiography and bloodflow, SPECT, and PET scans.

- **Stony Brook's neurosurgeons use advanced techniques and equipment** such as image-guided neuronavigation, microsurgery, interoperative ultrasound, and awake craniotomy with cortical mapping for surgery near sensitive areas of the brain. They also use minimally invasive techniques such as neuroendoscopy; endovascular neurosurgery (which provides preoperative embolization, intraarterial delivery of chemotherapy, and intraoperative angiography); minimal-access spinal surgery; and stereotactic radiosurgery.

**TEAM MEMBERS**

**Surgery:** Frederick Gutman, MD, Team Leader; Raphael Davis, MD; Michael Egnor, MD; Robert Galler, MD; Arthur Rosiello, MD; and David Schessel, MD

**Medical Hematology/Oncology:** Shenhong Wu, MD

**Pathology:** Roberta Siedman, MD

**Radiation Oncology:** Tae Park, MD, and Edward Valentine, MD

**Radiology:** Corazon Cabahug, MD, and Clemente Roque, MD

- **Clinical research is a major part of the Neurologic Oncology Team**, and several ongoing projects hold promise. One is looking at investigational biologic agents to inhibit growth factors that modify abnormal function of several pathways. This is important because molecular analysis of malignant cells may provide information on the sensitivity of the tumor to a given therapeutic combination in order to predict response, early relapse, and the side effects of treatment. Another basic research initiative, headed by Dr. Mirjana Maletic-Savatic, is investigating spectral biomarkers to detect and distinguish different tumor types.

## LEUKEMIA, LYMPHOMA, AND TRANSPLANTATION MANAGEMENT TEAM

### Overview

The Leukemia, Lymphoma, and Transplantation Management Team treats blood-related cancers and cancers of the lymphatic system. Modalities used include the most current diagnostic testing, chemotherapy, immunotherapy, radiation, and transplantation. Stony Brook's Blood and Marrow Stem-Cell Transplant Program has the only inpatient unit in Suffolk County specifically designed for patients receiving this treatment.

Team members involved in the transplant process meet weekly to discuss each patient's treatment plans, as well as the medical and psychosocial issues involved. They work closely together to ensure that each patient's needs are met and that the transplant, which is a very complex procedure, is carried out seamlessly. Our oncology-certified nurses coordinate the Leukemia/Lymphoma Bone Marrow Transplant Services and serve as point persons to provide support for the patient and family during the entire process.

### Highlights

- **Stony Brook opened the Blood and Bone Marrow Transplant Unit in 2004**, which allows the Hospital to perform both autologous stem cell transplants (from the patient's own body) and allogenic transplants (from a donor match).

- **Stony Brook is a member of the Cancer and Leukemia Group B (CALGB)**; the International Bone Marrow Transplant Registry, which maintains and analyzes clinical data and supports clinical trials; and participates in the National Marrow Donor Program.

**TEAM MEMBERS**

**Medical Hematology/Oncology:** Shambavi Richard, MD, Team Leader, Associate Director, Hematology/Oncology; Fengshuo Lan, MD, PhD; Neetu Radhakrishnan, MD; Josephine Lobrutto, NP; Emily Locher, RN, OCN; Nirmala Singh, RN; and Michelle Stevens, NP, AOCNS

**Pathology:** Marc Golightly, PhD; Youjun Hu, MD; and Frederick Miller, MD

**Radiation Oncology:** Tae Park, MD, and Edward Valentine, MD

**Scientific Director:** Nabil Hagag, PhD

## PEDIATRIC ONCOLOGY MANAGEMENT TEAM

### Overview

Stony Brook's Pediatric Oncology Management Team has been at the forefront of using a multidisciplinary approach to treat cancer. With the highest patient satisfaction scores at the Medical Center, it has become a model for other departments, who have seen increases in their scores after adopting the care paradigm. Since the Pediatric Oncology Program began in 1991, the team has treated more than 500 children with malignant tumors. In 2007, the team saw 1,800 inpatients and 2,200 outpatients. In addition, more than 50 percent of the children in Suffolk County with childhood tumors were treated at Stony Brook, two-thirds of whom were enrolled in clinical trials and other investigational therapies. Stony Brook's rate of clinical trial participation is equal to or greater than national statistics, and its disease-specific cure rates remain at or above the national averages for major childhood cancers such as acute leukemia, brain tumors, lymphoma, neuroblastoma, Wilms tumors of the kidney, and bone and soft tissue sarcomas.



### Highlights

- **All of the team's pediatric surgeons, radiation oncologists, and pediatric oncologists are members** of the prestigious Children's Oncology Group.

- **The team's growing School Re-Entry Program, offered to all school districts on Long Island free of charge**, has received both regional and national recognition.

- **Laboratory research includes investigating the mechanism of tumorigenesis for neuroblastomas and brain tumors**; studying the late effects of cancer therapy, focusing on the development of bone mineral loss during therapy (this study encompasses one of the largest groups of such children treated for childhood cancer); and studying children with bone marrow failure diseases such as Fanconi anemia.

- **The team support services, including The Parent Support Group, Our Little Heroes, and specialized sibling and bereavement programs**, are open to all Suffolk County families, regardless of where they receive treatment.

Since the Pediatric Oncology Program began in 1991, the team has treated more than 500 children with malignant tumors. In 2007, the team saw 1,800 inpatients and 2,200 outpatients.

### TEAM MEMBERS

**Pediatric Medical Hematology/Oncology:** Robert I. Parker, MD, Team Leader, Director, Pediatric Hematology/Oncology; M. Yasar Celiker, MD; Edward L. Chan, MD; Devina Prakash, MD; Debra Giugliano, RN, CPNP, CPON; Patricia Losquadro, RN; Rosemary A. Mahan, RN, CPNP; Kammy McLoughlin, CSNP; Patricia Murray, RN; Maria Narine, RN, CPNP; and Lori Seda, RN

**Pediatric Surgery:** Thomas Lee, MD, and Richard Scriven, MD

**Pathology:** Cynthia Kaplan, MD

**Radiation Oncology:** Edward Valentine, MD, and Tamara Weiss, MD

**Radiology:** Dvorah Balsam, MD

## SURGICAL ONCOLOGY

Brian O’Hea, MD, Acting Chief, Surgical Oncology

**Overview:** Surgeons in Stony Brook’s Department of Surgery offer the highest degree of specialization and expertise. Recognizing the relationship between volumes and outcomes, each surgeon focuses on a specific area of cancer. In addition, the Department of Surgery works closely with the Hematology/Oncology and Radiation Oncology divisions to provide multimodality approaches to cancer—often collaborating to design and implement new protocols for treatment of various tumors.

**Implementation:** The department has been on the forefront of using minimally invasive surgical techniques, including laparoscopy and robot-assisted surgery. It also has a number of

members with expertise in sentinel node biopsy for staging breast cancer and malignant melanoma; as a result, active clinical work is also being conducted. A major role for surgeons is serving as members and leaders of the Disease Management Teams. They also participate in ongoing tumor board meetings. Stony Brook’s surgeons are partners in more than 50 protocols activated by the Medical Center’s Institutional Review Board, including American College of Surgeons Oncology Group research protocols; the National Surgical Adjuvant Breast and Bowel Project; Cancer and Leukemia Group B; and the National Institutes of Health-funded research on consent for tumor bank tissues.

In addition, surgeons are the primary collaborators with pathologists in the Stony Brook Tumor Tissue Bank, a prime resource for translational and basic science research.

The department has been on the forefront of using minimally invasive surgical techniques, including laparoscopy and robot-assisted surgery.

## HEMATOLOGY AND ONCOLOGY

Program Leader: Theodore G. Gabig, MD, Chief, Medical Hematology/Oncology

**Overview:** The Department of Hematology and Oncology offers a comprehensive program in cancer treatment and research, evaluating and treating a wide range of malignant diseases using chemotherapy, biologic response modifiers, targeted therapies, and other new systemic therapies. Led by physicians and researchers who are best in their fields, the department includes nurse practitioners, chemotherapy-certified

oncology nurses, a Patient Navigator who is an oncology-trained nurse, and research nurses, most of whom participate in the site-specific Disease Management Teams. The Medical Oncology Inpatient Unit maintains 37 beds, four of which are dedicated for bone marrow transplantation. The outpatient oncology cancer clinic provides chemotherapy and expert oncology nursing, and sees approximately 11,000 patient annually.

**Implementation:** The department oversees a number of specialty programs, including the Blood and Bone Marrow Stem-Cell Transplant Program. With its own specialized unit that maintains state-of-the-art infection control, the program offers specialized services for autologous and allogeneic bone marrow transplantation for leukemia, lymphoma, and multiple myeloma. Clinical trials are open for every major cancer site and

include treatment for prostate, breast and colon cancers; glioblastoma multiforma; and aggressive malignant astrocytomas. Research includes the development of a system for detection of new cancer cell markers and for isolating cancer cells circulating in the blood, as well as collaborations with national research groups and pharmaceutical companies.

## RADIATION ONCOLOGY

**Program Leader:** Allen G. Meek, MD, Chair and Clinical Director, Radiation Oncology

**Overview:** Stony Brook's Department of Radiation Oncology works with staff from the Hospital, the School of Medicine, and the Research Foundation of New York, to deliver comprehensive, state-of-the-art cancer care, with a focus on delivering highly targeted radiation that limits exposure to normal tissue. The department's innovative approaches to treatment and its ongoing acquisition of advanced technology has made it a regional resource. Members play a key role on the Disease Management Teams. The department is composed of 5 physicians, 5 physicists, 3 medical dosimetrists, 15 radiation therapists, 8 nurses and nursing assistants, 6 administrators, and 16 clerical/secretarial staff. In 2007, the department saw 1,038 consults and delivered 18,140 external beam radiotherapy treatments. In addition, it performed 284 low-dose and high-dose rate brachytherapy procedures, 17 prostate implants, 150 radioiodine ablations for thyroid cancer, and a total of 38 radiosurgery procedures.

### Implementation:

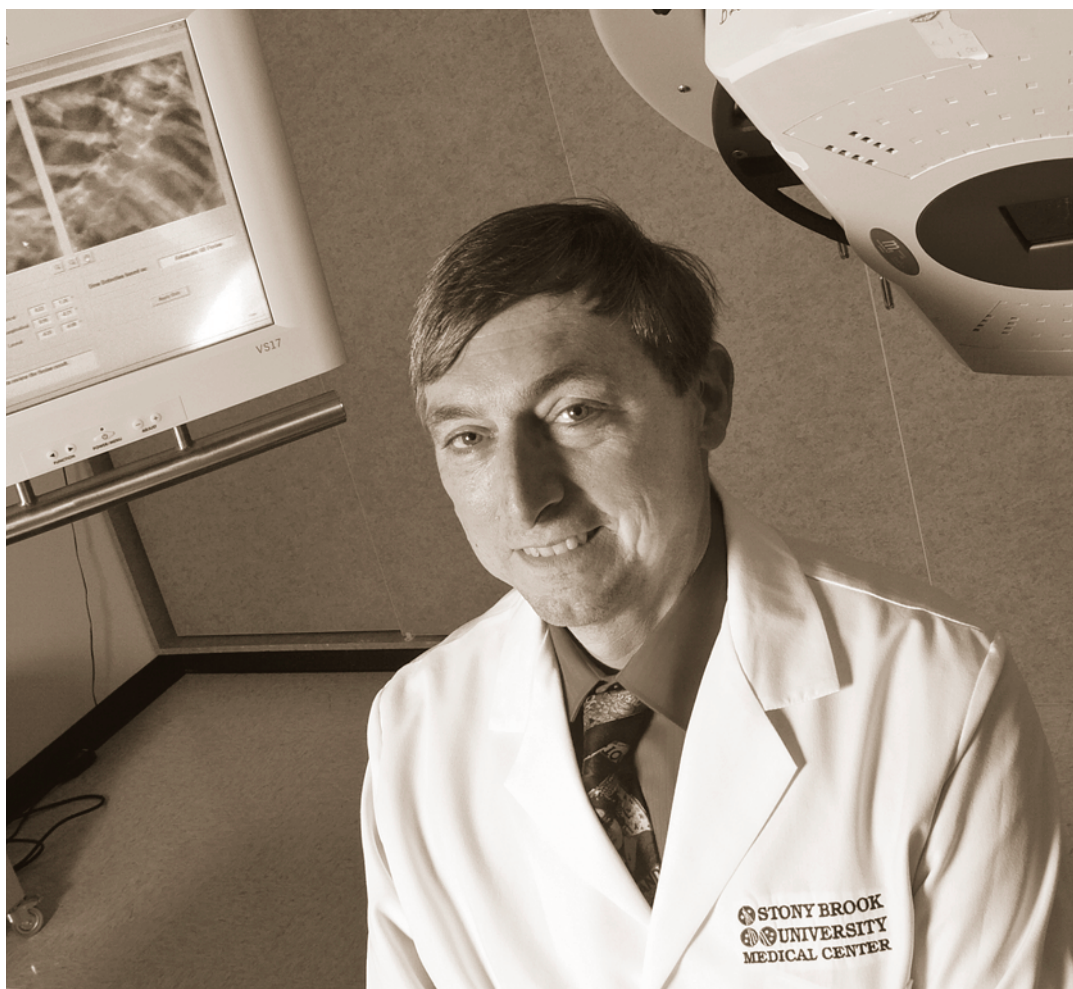
- Radiotherapy procedures available include external beam radiotherapy from three linear accelerators (delivered via either three-dimensional conformal or intensity modulated beams); low- and high-dose rate brachytherapy (delivered intracavitarily, orally, intravenously, or surface, with the prostate seed implant

program offering an alternative in which the seeds are placed directly into the prostate gland); total body radiotherapy; and stereotactic radiosurgery and stereotactic radiotherapy using a linear accelerator with a special BrainLAB micromulti-leaf collimator. Other treatments include radioimmunoglobulin administration and radiotherapy using a CT simulator to facilitate a sophisticated treatment planning program.

- New equipment includes a state-of-the-art ExacTrac® X-ray 6D System for image-guided radiation therapy (IGRT); Varian's Real-Time Position Management Respiratory Gating System; GE's Advantage 4D™ CT Software to overcome tumor motion; the Eclipse® Treatment Planning System that helps radiation beams conform to the shape of the tumor; and the Varian ARIA® Oncology Information System, which supplies an electronic patient medical record.

- The department, in conjunction with the Department of Radiology, has a residency program in medical physics. With Stony Brook University's School of Health Technology and Management, the department also trains medical dosimetrists.

- Research focuses on clinical trials, including developing software and hardware to advance radiation treatment techniques and investigating new techniques or applications.



## ONCOLOGY NURSING

**Program Leaders:** Lee Anne Xippolitos, RN, PhD, Chief Nursing Officer, and Rose C. Cardin, RN, Associate Director of Nursing

**Overview:** As certified oncology professionals and vital members of the Disease Management Teams, the Oncology Nursing staff delivers cohesive patient and family centered care. They are committed to providing compassionate and seamless nursing services during all phases of treatment along the cancer continuum, including ambulatory care, chemotherapy and infusion units, adult and pediatric inpatient units, radiation oncology, consultation and liaison services, clinical trials, and the Blood and Bone Marrow Transplant Unit. Oncology-trained nurses also serve as Patient Navigators.

**Implementation:** Nursing has provided support for this year's

volume growth, and the opening of additional beds on the Bone Marrow Transplant Unit and Medical Oncology Unit. The successful recruitment of highly trained, skilled, and motivated nurses has allowed Stony Brook to maintain its quality initiatives and improve patient satisfaction scores. The nursing staff on the Surgical Oncology Unit continues to maintain one of the Hospital's highest patient satisfaction ratings, as well as its national ranking in the 99th percentile. Stony Brook's oncology nurses have achieved national recognition with poster presentations at the Association of Nurse Executives and the Association of Medical Surgical Nursing. Both posters highlight

the dedicated work of our nurses, empowering nursing staff in leadership, and caring for patients with ostomies. Stony Brook's oncology nurses remain

up-to-date in their field through mentorships and other supports, as well as taking an active role in the National Oncology Nursing Society.



## DIAGNOSTIC RADIOLOGY

**Program Leader:** John Ferretti, MD, Interim Chair, Diagnostic Radiology

**Overview:** Diagnostic imaging plays a critical role in initial cancer diagnosis, treatment planning, and palliative therapies through interventional techniques and cancer monitoring. The Department of Radiology offers state-of-the-art clinical care and recently has expanded to enhance services. This includes adding healthcare professionals with expertise in thoracic disease, breast imaging, virtual colonoscopy, and body MRI. Several radiology

faculty attendings are involved with research projects related to cancer imaging, as well as developing new modalities in breast cancer imaging. Physicians from the Department of Radiology attend multidisciplinary tumor board meetings where they provide consultation and review images during case presentations.

**Implementation:** The Department of Radiology continues to acquire leading-

edge equipment, including a position emission tomography/computed tomography (PET/CT) scanner, which can more accurately detect and stage malignancies; a new 64-slice CT scanner, which has increased speed and accuracy along with the ability to produce high-resolution 3D images; and two 1.5 Tesla MRI scanners, which not only have increased speed and accuracy but also can perform non-invasive diagnosis of malignancies. On order is an

endorectal MR coil to enhance staging of rectal and prostate cancer. Ultrasound units have been upgraded with tissue harmonics and an increased field view; some can even perform 3D imaging. The department continually upgrades its picture archiving and communications system for rapid accesses to viewing digital images at multiple sites for both radiologists and clinicians.



## PATHOLOGY

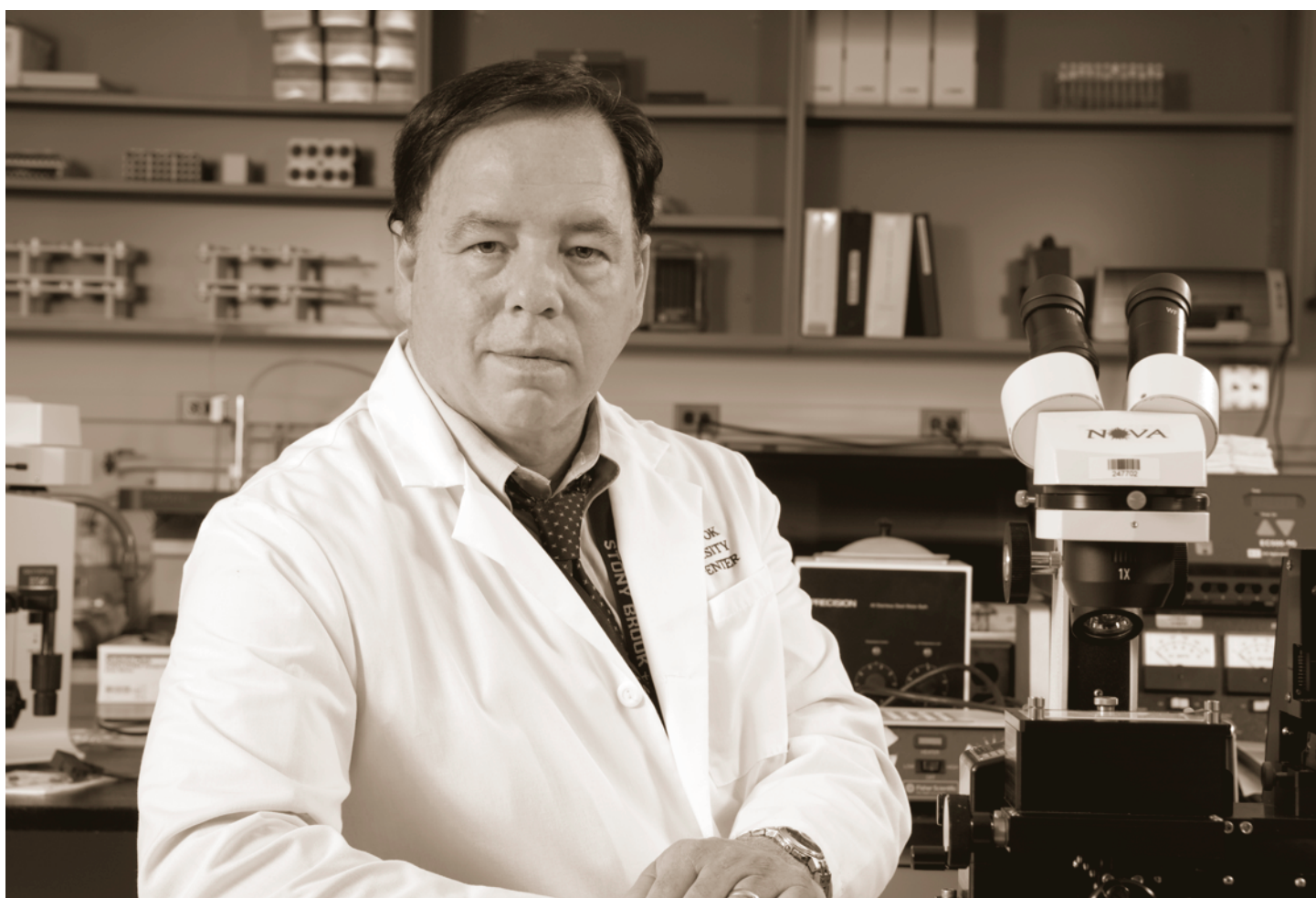
**Program Leader:** Kenneth R. Shroyer, MD, Chair, Department of Pathology

**Overview:** Pathology faculty specializing in the areas of breast, gynecology, digestive, thyroid, genitourinary, lung, melanoma, sarcoma, leukemia, and lymphoma provide disease management team support. They participate in departmental meetings and site-specific cancer conferences; support cancer diagnoses and

management with specialty tests, including expanded cytogenetic services and molecular tests; perform clinical research; maintain a Frozen Tissue Bank; and use specially designed information systems for standardization in cancer diagnosis and treatment.

**Implementation:** Departmental advances include using synoptic protocols for reporting cancer specimens. In 2007, using College of American Pathologists guidelines, the department exceeded the 90 percent national benchmark in this category. It implemented new guidelines for soft tissue and bone cancers, and updates for prostate and

thyroid cancer prior to the established deadline. Continued research addresses molecular events associated with tumor-cell invasiveness, investigating mechanisms responsible for immortalization and dysregulation of the cell cycle in tumor cells, and understanding the carcinogenic effects of radiation.



## PHARMACY SERVICES

**Program Leaders:** Jeannene Strianse, RPh, Director; Benny Chan, RPh; John Farrell, RPh; and Scot Weber, RPh, BCOP

**Overview:** The Pharmacy Department at Stony Brook University Medical Center provides chemotherapy compounding and dispensing services to both adult and pediatric inpatients and outpatients. For efficiency and convenience, each area has its own pharmacy. All are certified

USP 797-compliant facilities that meet the most rigorous government requirements for the preparation of sterile compounds, and employ state-of-the-art equipment and quality control measures that surpass stringent government requirements.

**Implementation:** Stony Brook's pharmacy services are delivered by knowledgeable and experienced licensed pharmacists who make patient safety a top priority. They adhere to strict operating procedures. Only specially trained registered pharmacists compound and dispense anti-neoplastic medications. Each

order undergoes a multiple double-check process in which the pharmacist reviews the physician order, recalculates the dosage, performs allergy checks, and identifies potential drug-drug or drug-food interactions. The result: an efficient, reliable, and, most important, safe operation.

## PAIN MANAGEMENT

**Program Leaders:** Peter Glass, MB, ChB, FFA (SA), Chair, Anesthesiology and Director, Center for Pain Management; Brian Durkin, DO, Director, Acute Pain Management; Carole Agin, MD; Irina Lokshina, MD; Forrokh Maneksha, MD; Margaret Fischer, NP; Stacey Hildebrand, NP; Diane Santangelo, NP; and Julie Scheuermann, NP

**Overview:** Using a multidisciplinary approach, the Pain Management Team works closely with the patient's oncologist to address pain management needs on both an inpatient and outpatient basis. The team also helps patients with strategies for living with and managing pain to maintain normalcy in their lives,

including those patients who are living with chronic pain. The program dedicates resources to education and research, and can refer patients to research studies when appropriate.

**Implementation:** Hospitalized patients can receive oral, intravenous, or central axis (epidural

or intrathecal) medications administered through conventional routes or patient-controlled analgesia (PCA). Outpatients with chronic pain are evaluated and treated at the Center for Pain Management in the Cancer Center. The Center, staffed by anesthesiologists and nurse practitioners with expert-

ise in pain management, treats acute, chronic, benign, and cancer-related pain. Modalities include acupuncture, nerve blocks, infusions, intrathecal pumps, and dorsal column stimulators. A dedicated Fluoroscopy Suite allows the Center to offer fluoroscopic guidance.

## PHYSICAL REHABILITATION

**Program Leader:** Catherine M. Tuppo, PT, CLT-LANA, Director, Physical and Occupational Therapy, and Director, Lymphedema Therapy

**Overview:** The Department of Physical and Occupational Therapy provides inpatient and outpatient physical rehabilitation for adult and pediatric oncology patients with a focus on improving function. Referred patients receive a detailed assessment followed by an individualized treatment plan that incorporates the goals of patient and family.

During treatment, the team maintains close communication with referring physicians. The department is actively involved in community education and participates in research, with an emphasis on lymphedema.

**Implementation:** In addition to individualized therapy, the department participates in spe-

cialty programs. Over the past two years, the Inpatient Physical Therapy service has been active with the Pre-op Information and Education class for upper and lower GI cancer surgeries. The majority of patients have breast cancer-related lymphedema. Other patients have gynecologic, melanoma, or other cancer etiologies. Three specially

trained physical therapists, dedicated to treating lymphedema from the effects of cancer treatment are part of the Lymphedema Therapy Program. The Therapeutic Yoga Program, supervised and coordinated by a physical therapist who is a certified yoga instructor, is tailored to patients with cancer, and is open to family and friends.

## NUTRITION SERVICES

**Program Leaders:** Kathleen Werther, Director; Janice Antino, RD, Inpatient Pediatrics Oncology Dietitian; Jennifer Fitzgibbon, RD, Outpatient Oncology Dietitian; Andrea McNaught, RD, Inpatient Adult Oncology Dietitian

**Overview:** Nutrition can play a role in cancer prevention, support the patient’s health during treatment, and help prevent recurrence. Stony Brook University Medical Center employs registered dietitians and nutrition experts to counsel patients and their families on appropriate strategies for eating. They devise an individual nutrition plan based on the patient’s medical and family histo-

ry, lifestyle factors, and personal goals. Counseling is available to adult and pediatric patients on an inpatient and outpatient basis. A dedicated full-time oncology dietitian is available at our ambulatory Cancer Center. In 2007, Stony Brook nutritionists served approximately 500 new patients.

**Implementation:** After assessing the patient, the dietitian pro-

vides the patient and/or caregiver with individualized written information and verbal counseling, focusing on foods that help ensure optimal nutrition and that will also be enjoyable. Inpatient meals are provided by a “room service” menu system, overseen by an award-winning executive chef, allowing patients to request meals according to their own schedules and tastes. Outpatient services focus on

ensuring adequate nutrient intake during treatment, as well as minimizing side effects that may hinder nourishment. Inpatients and outpatients receive continual monitoring so that eating plans can be modified appropriately; follow-up care and referral to community resources is also part of the service. The department provides community education and support with a focus on cancer prevention.

## SURVIVORSHIP AND SUPPORTIVE CARE PROGRAM

**Program Leaders:** Lynn Hallarman, MD, Palliative Care Specialist, and Sandra Leonard, NP

**Overview:** This Hospital-based program has a mission to help relieve suffering and improve the quality of life for patients with a life-threatening cancer diagnosis—whether they are receiving curative treatments or comfort measures. It also addresses the unique needs of the family during this time. The program takes a whole-person interdisciplinary approach to assess and treat cancer-related symptoms.

**Implementation:** Led by board-certified palliative care expert Lynn Hallarman, MD, the core team includes two full-time nurse practitioners and a part-time social worker. They follow patients through their entire hospital stay, work closely with the primary treatment team,

and smooth the transition to home and community. The team provided approximately 40 consults a month for a total of 303 consults (plus 40 home hospice patients) in 2007.

Following a study of palliative care consults that identified several issues, such as delays in referrals, insurance concerns, delays in the communication process, and difficulty identifying palliative care patients, the team made several key changes, including:

- Providing education to the medical and surgical teams, nurses, social workers, and geriatric and oncology fellows
- Developing a Foregoing Life Sustaining Treatment policy and the tools to implement it

- Receiving sanctioning for staff to administer patient-controlled analgesia (PCA) pumps
- Establishing an interdisciplinary team daily meeting with core members and pastoral care representatives

- Attending rounds and participating in oncology teaching rounds
- Developing a consult guide for survivorship and supportive care



## CHILD LIFE PROGRAM

**Program Leaders:** Michael Attard, CCLS; Sharon Boney, CCLS; and Paulette Walter, CCLS

**Overview:** The Child Life Program brings one of the most important elements to children who find themselves in what can be a scary hospital environment: play. Based on the theory that play is fundamental to a child's growth and development, the Child Life Program is available to patients in the Pediatric

Hematology/Oncology Division in both the ambulatory and inpatient units. Using a variety of "tools"—including three supervised playrooms filled with games, toys, and arts and crafts—Child Life Specialists work closely with the child, family, and medical team to reduce anxiety and provide the

opportunity to engage in everyday childhood activities to "normalize" the experience.

**Implementation:** Child Life Specialists support the patient during invasive or painful procedures using guided imagery, relaxation, and/or distraction techniques.

They also provide pre-operative teaching and medical play to help prepare the child and family for an upcoming treatment. In addition, they collaborate with the medical team and local schools to ease the child's re-entry to school, promoting sensitivity and acceptance among peers.

## SOCIAL WORK SERVICES

**Program Leaders:** Susan McCarthy, LMSW, Director of Social Work; JoAnn McCaslin, LCSW, Social Work Supervisor; Mohini Jose, LCSW, Supervisor, and Gynecologic Oncology; Shirley Calhoun, LCSW, Carol M. Baldwin Breast Care Center; Paulet Farquharson, LCSW, Surgical Oncology and Radiation Oncology; Erin Hendrickson, LMSW, Medical Oncology; Darlene Ernest Kenny, LCSW, Medical Oncology and Blood and Bone Marrow Stem-Cell Transplant; and Geoffrey O'Connell, LCSW, Prostate Cancer Support Group

**Overview:** An important component of Stony Brook's comprehensive cancer care program, social work services—available to both inpatients and outpatients—help patients and families handle the emotional and psychosocial components

of cancer treatment throughout the continuum of care. This includes everything from coping with diagnosis to navigating benefits and entitlements. As part of the interdisciplinary team, social workers can evaluate patient and family needs,

assess post-discharge concerns, and refer patients to transportation assistance, community services, and support groups.

**Implementation:** In addition to their work on the Disease Management Teams and their

one-on-one patient care, social workers facilitate a number of active support groups addressing specific cancers, including breast, prostate, lymphoma, gynecological, and upper GI. They also co-facilitate a cancer education series program.

## CANCER HELPLINE

**Program Leaders:** Teresa Beutel, Director, Healthcare Teleservices/Resource Centers, and Lori Tischler, RN, Oncology Nurse

**Overview:** Staffed by oncology nurses, this confidential helpline is available to answer concerns about cancer—including questions on prevention, risk, screening, detection, second opinions, terminology, and

current research—as well as to encourage community members to act promptly and seek early detection and intervention. The nurses also handle referrals to physicians and community services.

**Implementation:** The Cancer Helpline is available at (800) 862-2215 Monday through Friday between 8:30 am and 7:00 pm. Community members also can access the helpline via the Stony Brook University

Medical Center Web site, which allows individuals to send e-mail questions or view the answers to frequently asked questions.

## CHAPLAINCY SERVICES

**Program Leaders:** Chaplain Stephen Unger, Director of Chaplaincy; Chaplain Anne Coulehan; and Chaplain Madeline Queck

**Overview:** As the clinical professional discipline specializing in the spiritual component of healthcare delivery, chaplaincy at Stony Brook University

Medical Center is an important part of the comprehensive Body-Mind-Spirit model for quality-integrated healthcare. Chaplaincy is valued for many

reasons, not the least of which is the relationship between strengthening the spirit and effective cancer treatments. In addition, because a diagnosis

for cancer often becomes the catalyst for a spiritual search, having qualified chaplains experienced in cancer care available 24/7 adds another dimension to the healing process. Chaplains can assist patients in strengthening their coping skills, developing hope, and finding meaning during what can be a very intense time in their lives.

**Implementation:** Chaplains visit patients with cancer in both Stony Brook University Medical Center and the oncology clinics. They attend to the spiritual needs of patients and families on an interfaith basis, also accommodating requests for specific faith traditions. Chaplains offer staff support, participate in interdisciplinary care rounds, aid in ethical and end-of-life decision making, assist with support groups, and provide bereavement and grief support.



Chaplains attend to the spiritual needs of patients and families on an interfaith basis, also accommodating requests for specific faith traditions.

## COMMUNITY OUTREACH AND EDUCATION

**Program Leaders:** Yvonne Spreckels, Director, Community Relations; Sabra Boughton, NP, PhD, Patient Education Coordinator; Margaret Davis, Project Associate for Witness Project® of Long Island; and Susan McCarthy, LMSW, Director of Social Work

**Overview:** As a dedicated steward of community health, Stony Brook University Medical Center is committed to helping individuals and community-based organizations gain access to healthcare services and live healthier lives. This has manifested by partnering with other organizations in the community; providing workshops, lectures, seminars, and screenings; working with school districts to teach students about nutrition, exercise, and the dangers of tobacco; and providing child safety information to parents, educators, and school nurses.

**Implementation:** In the past year, the department educated 711 persons on skin cancer and sun exposure, and 1,427 people on tobacco use and second-hand smoke—far surpassing the goal of reaching 500 community members with each initiative. Some of Stony Brook’s other initiatives included:

- Publishing *Better Health, Better Living*, a newsletter that reaches more than 130,000 area residents with key information on prevention, screenings, and available hospital services.

- Reaching the underserved communities by identifying health issues and addressing healthcare disparities. A key initiative has been the Health Occupations Partnership for Excellence program, which educates secondary school students from low-resource/high-need districts on healthcare careers, health issues, and achieving academic success. Stony Brook has also partnered with the Suffolk County Department of Health’s Office on Minority Health to provide free screenings, prevention/education, and

health insurance assistance programs.

- Addressing the disparity in breast cancer morbidity rates in populations through the Witness Project® of Long Island at the Cancer Center, the program targets women of African descent, who have lower rates of breast cancer than other ethnic groups yet die at higher rates, by promoting awareness and screenings. In 2007, the project reached 405 community members.

## CANCER LIAISON PHYSICIAN

**Program Leader:** Colette Pameijer, MD, Surgical Oncologist and Cancer Liaison Physician

**Overview:** The cancer liaison physician is a liaison at many levels: between the Hospital and the community, between the national standards organizations and the Hospital, and between the Cancer Committee and the various departments at Stony Brook University Medical Center. For example, the liaison collaborates with the Cancer Committee to meet and exceed cancer program standards and improve clinical practice. In

particular, the liaison works with the Disease Management Teams to develop best practices, evaluate compliance with adopted guidelines, expand participation in clinical trials, and improve quality of care. The liaison also works with local agencies and the American Cancer Society (ACS) on community outreach and education as well as participates in peer group meetings to provide direction according to criteria

established by the American College of Surgeons Commission on Cancer.

**Implementation:** In addition to ongoing quality initiatives for the management of Stage III lymph node positive colon cancer and Stage I, II, and III breast cancer, the priority areas for 2007 were quality improvement, advocacy, American Cancer Society Partnership, clinical trials, and comprehensive

cancer control. Highlights include studies on data quality and completeness for breast and colorectal cancer; quality improvement dashboard reviews of National Comprehensive Cancer Network guidelines for patient management; community outreach and education on skin cancers and melanoma; ACS partnerships; and comprehensive cancer control in partnership with the New York State Consortium.

## BASIC AND CLINICAL RESEARCH

### What causes cancer? Are there better ways to prevent it? Can we find more effective treatments? Will we ultimately be able to develop a cure?

These are just some of the questions the researchers at Stony Brook University Medical Center grapple with on a daily basis. And as a premier academic medical center, Stony Brook has the resources, the facilities, and the scientific talent to uncover promising solutions to these questions and more. Researchers participate in prominent national studies, community-based projects, scientific investigation, and laboratory research.

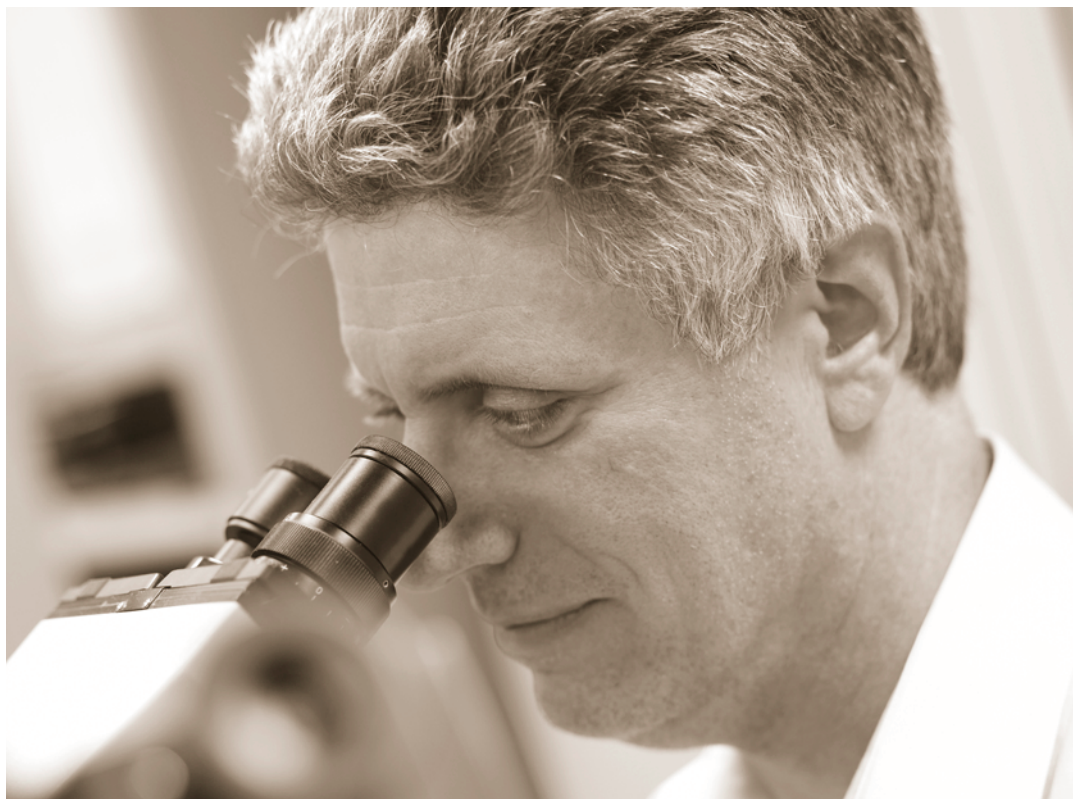
Although all 25 departments in the School of Medicine participate in research, a primary research affiliate at Stony Brook University Medical Center is the Department of Preventive Medicine, which conducts cancer research projects and provides core support to other departments, primarily in biostatistics and epidemiology. The residency program in Preventive Medicine and Public Health receives training support from the American Cancer Society and a federal Health Resources and Services Administration Grant.

In 2007, the General Clinical Research Center (GCRC) at Stony Brook University Medical

Center received a score of 148—its highest yet—and an “outstanding” evaluation by the National Center for Research Resources (NCRR) of the National Institutes of Health (NIH). (Note: Scores range from 100 to 500; a perfect score is 100 and scores between 100 and 150 are considered outstanding.) In addition, all major components of the GCRC—which includes leadership, diversity of research

initiatives, collaborative efforts, and institutional support—were rated outstanding. The evaluative report specifically highlighted the direction of the GCRC, its increased collaboration with Brookhaven National Laboratory, outstanding patient safety protocols, and exceptional plans for future research. The NCRR cited the biostatistical and informational components of the GCRC as “a model of

bioinformatics should be.” In addition, the NIH has already funded Stony Brook with a planning grant to prepare and apply for the Clinical and Translational Science Award, which would increase translational research and create an infrastructure to promote accelerated biomedical discovery and application of novel diagnostics and therapeutics.



## NEW AND ONGOING STUDIES AND TRIALS

**Following are highlights of some of the key research projects at Stony Brook University Medical Center.**

### The Selenium and Vitamin E Cancer Prevention Trial (SELECT)

**Goal:** Now in year eight, this 12-year prevention clinical trial is designed to study whether selenium and vitamin E can prevent prostate cancer. An ancillary study began this year to investigate whether these supplements can prevent colon cancer.

**Collaborators:** Led by Dr. Iris Granek, the trial is sponsored by the National Cancer Institute. Centers throughout the United States, Canada, and Puerto Rico participate. Stony Brook, with 372 men, has one of the highest enrollments in the nation.

### The Barbados National Cancer Study

**Goal:** To conduct an epidemiological study of environmental and genetic risk factors for prostate and breast cancer in the African-Caribbean population of Barbados. Last year, the NCI awarded a \$4 million grant to continue the prostate component of the study for an additional five years. This part of the study investigates genetic and obesity-related factors for disproportionately high rates of prostate cancer in men of

African descent. With a goal of gathering medical data on 960 confirmed cases and 960 control, the team currently has preliminary data on 400 of each.

**Collaborators:** Led by M. Cristina Leske, MD, MPH, DSc, from the Department of Preventive Medicine, Stony Brook is collaborating with the National Human Genome Research Institute, the Ministry of Health in Barbados, the University of West Indies, and the Translational Genomic Research Center in Arizona.

### The SCOPE Program (Suffolk County Preventive Endoscopy)

**Goal:** To launch a colorectal screening and education program for low-income adults age 50 or older who have little or no health insurance coverage for regular screenings. Screening colonoscopies are done by Stony Brook gastroenterologists.

**Collaborators:** The Centers for Disease Control (CDC) has awarded Stony Brook—one of only five institutions in the country to receive CDC funding—\$2.2 million. Also collaborating are Suffolk County Department of Health Services, the ACS, the Department of Preventive Medicine, Surgical Oncology and Gastrointestinal Divisions in the Departments of Medicine, as well as the Departments of Pathology and Diagnostic Radiology. Dorothy S. Lane, MD, MPH, Director; Mary Cavanagh, MD, MPH, Lead Public Health Clinician; Catherine Messina, PhD, Project Data Manager.

### Studying the Mechanisms Behind Tamoxifen-Induced Endometrial Cancer

**Goal:** To discover the biochemical causal mechanisms in tamoxifen—which is a first-line antiestrogen for the treatment and prevention of breast cancer—associated with increased endometrial cancer and to develop new and safer antiestrogen agents. This research, conducted by Shinya Shibutani, PhD, Pharmacological Sciences, has identified some genetic and toxic changes associated with tamoxifen-induced endometrial cancer.

**Collaborator:** The National Institute of Environmental Health Sciences.

### Bladder Cancer Research

**Goal:** The Department of Urology is conducting basic research to develop and validate transgenic mouse models for bladder cancers that resemble human disease. The department is also working on a novel *Bacillus Calmette-Guerin* (BCG) cancer vaccine that expresses different cytokines. If proven therapeutic and safe in mice, it will be developed further for clinical trials in humans.

**Collaborators:** Urology is working with researchers at New York University on the bladder cancer models and the University of Iowa on the vaccine.

### Technology to Accurately Diagnose Metastatic Tumor Cells in the Blood

**Goal:** To develop an integrated technology that can define “metastatic” cancer cell gene expression in the blood, which, in turn, can lead to detection of cancer in its early stage. This is a key breakthrough because currently no technology exists for isolating cancer cells from blood as they occur at rates of one in 100 million. The technology is being tested for cancers of the ovary, pancreas, colon, prostate, breast, and lung. It may be particularly useful in diagnosing and staging lung cancer, which is difficult to biopsy.

**Collaborators:** Researcher Wen-Tien Chen, PhD, in the Department of Medicine, received a four-year, \$2.8 million NCI grant in 2004. He also works with clinicians at Stony Brook University Cancer Center and the General Clinical Research Center (GCRC) who provide blood and tissue samples of colon and breast cancers. In addition, as a joint venture with Stony Brook University, Dr. Chen has established a biotechnology company focusing on commercializing cell separation technologies (WTC1) in the form of blood tests for cancer diagnoses.

### Colorectal Screening Projects

**Goal:** To increase colorectal cancer screening in the state by addressing the needs of the



large and diverse population of adults ages 50 and older.

**Collaborators:** Led by Dorothy S. Lane, MD, MPH. Sponsors include the CDC, the SCS, and the New York State Department of Health.

### The National Women's Health Initiative (WHI) Clinical Center at Stony Brook

The WHI is currently involved in several national, highly influential studies:

- The WHI Clinical Trial and Observational Study. This national study, which continues with follow-up through 2010, has had a profound effect on medical practices following the findings of post-menopausal hormone trials. The clinical trials tested the role of hormone therapy; low-fat diet that is high in fruit, vegetables, and grains; and calcium and vitamin D supplements on the health of 3,400 post-menopausal women. Major outcomes studied are breast and colorectal cancer, cardiovascular disease, and fractures due to osteoporosis.

Dorothy S. Lane, MD, MPH, Principal Investigator and Iris Granek, MD, MS, Co-Principal Investigator, both of whom are also investigators for the National Health Lung and Blood Institute.

- “Decisions About Cancer Screening in Older Women.” This NCI-supported study examines the decision making strategies used by women over age 65 for breast, cervical, and colorectal cancer screening. Because it involves the same women enrolled in the WHI observational study, a wealth of information is accessible.

Catherine Messina, PhD, Principal Investigator; Dorothy S. Lane, MD, MPH, and Iris Granek, MD, MS, Co-Investigators.

### Stony Brook's Institute of Chemical Biology and Drug Discovery

Currently, there are two NCI-funded projects that look extremely promising.

- One project on the discovery and development of the new generation taxoids led by Dr. Iwao Ojima has identified IDN5109 (SB-T-101131) as a promising drug candidate and is now entering phase II clinical trials.

- Another project is focusing on the development of tumor-targeted drug conjugates that are specifically delivered to tumors and internalized into tumor cells so that potent anti-cancer agents are released into the cytoplasm.

## EXAMPLES OF PUBLISHED RESEARCH

### Investigation Advances Science

Investigators in the Department of Urology, in collaboration with the Department of Medicine, have published research that has expanded the current knowledge base for prostate cancer metastasis and may eventually lead to the development of new treatments for trials in humans. Other investi-

gators in the department, working with the Department of Surgery, have published research that demonstrates the utility of urine telomerase activity as a screening tool for prostate cancer—with future studies planned to investigate the potential benefit of this as a first-line screening test.

## THE STONY BROOK TISSUE BANK

### Translating Basic Science into Improved Clinical Practices

Established in 2004 in the Department of Pathology by the Medical Center and the School of Medicine, this facility banks normal, abnormal, and malignant tissue specimens and serums to support the discovery of molecular diagnostics and markers of disease progression. The laboratory is directed by

Surgical Pathologist Youjun Hu, MD, assisted by experienced researcher Gayle Lark. Dr. Hu works closely with cancer surgeons to obtain tissue specimens under informed patient consent. To date, 325 specimens have been accrued to create a database encompassing a wide range of malignancies.

## GRANT HIGHLIGHTS

**Targeted Research Opportunities**

Recently, Stony Brook achieved an institutional record high of 14 Targeted Research Opportunities (TRO) grants, awarded to 18 faculty members. These grants, totaling nearly \$800,000, will advance efforts in translational research in the areas of cancer, human genetics, high-tech imaging, and biomedical engineering and technology development. Funding comes from a coordinated effort by the Office of Scientific Affairs and the Office of the Vice President for Research with the Coulter Foundation, the Carol M. Baldwin Fund, The Ward Melville Heritage Organization, and the Catacosinos Fund.

**The Susan G. Komen for the Cure Research Grant**

Chosen from a field of more than 1,200 applicants worldwide, two Stony Brook researchers were awarded Susan G. Komen for the Cure® research grants. These prestigious grants are given annually to a top researcher whose innovative work shows great promise toward discovery and cures for breast cancer.

Emily Chen, PhD, Assistant Professor, Department of Pharmacological Sciences was chosen for a grant based on her biochemical and molecular research that analyzes how breast cancer cells capable of organ-specific metastasis enter,

survive, and grow in targeted organs. Results may lead to novel diagnostic markers and therapeutic targets for patients with advanced metastatic breast cancer.

Wei-Xing Zong, PhD, Assistant Professor, Department of Molecular Genetics and Microbiology, was honored for his work in examining the role of autophagy in breast cancer cell death in response to chemotherapy. Dr. Zong hopes to determine whether autophagy should be inhibited or enhanced to achieve specific outcomes in anti-cancer therapy.

**NIH Cancer Grants**

Stony Brook University physicians and scientists conduct research with the support of NIH-funded grants. The following are among the investigators who have been awarded cancer grants:

Jian Cao, MD; Howard Crawford, PhD; Arthur Grollman, MD; Patrick Hearing, PhD; Bernadette Holdener, PhD; Charles Iden, PhD; Dorothy Lane, MD, MPH; M. Cristina Leske, MD, MPH; Jerome Liang, PhD; Catherine Messina, PhD; Ute Moll, MD, MS; Iwao Ojima, PhD; Basil Rigas, MD; Ghassan Samara, MD; Elinor Schoenfeld, PhD; Kenneth Shroyer, MD, PhD; and Jennie Williams, PhD.

**THE CANCER CLINICAL TRIALS OFFICE**

**Program Leaders:** Robert I. Parker, MD, Medical Director for Clinical Trials; Patricia Hentschel, NP, Administrative Director for Clinical Trials; and research nurses Patricia Dellibovi, RN; June Giardelli, RN; Kim Lykтей, RN; Carol Martin, RN; and Maryann Parrish, RN

The Cancer Clinical Trials Office assists Stony Brook University Cancer Center investigators in developing and completing scientifically valid clinical trials in an organized, cost-effective, and methodologically sound manner. Major areas of responsibility include protocol support services, such as activation and monitoring, data management,

and providing research nursing support.

The office is involved in a number of interdisciplinary multicenter clinical trials groups including the Eastern Cooperative Oncology Group (ECOG), the Children's Oncology Group (COG), the American College of Surgeons Oncology Group (ACSOG), the National Surgical

Adjuvant Breast and Bowel Project (NSABP), Cancer and Leukemia Group B (CALBG), the Gynecologic Oncology Group (GOG), and the Radiation Therapy Oncology Group (RTOG). In addition, the office coordinates in-house therapeutic research as well as phases I, II, and III pharmaceutical research trials.

Patients receive information about availability of cancer-related clinical trials through formal mechanisms that include brochures and pamphlets, Web sites, patient information packets, the patient library, patient support group seminars on clinical trials, and the research coordinators and Patient Navigators.

## CANCER SERVICES **QUALITY MANAGEMENT**

Program Leaders: William Greene, MD, Associate Director, Medical Regulatory Affairs, and Pamela Boremski, RN, Quality Management Specialist

**Overview:** The Cancer Services Quality Management Program works to ensure the delivery of safe, effective, efficient, and accessible care to meet or exceed patient expectations. Part of the Department of Continuous Quality Improvement, the program also responds to the Cancer Committee's direction in setting performance improve-

ment priorities that directly affect patient care. The program fosters a work environment that encourages the creation, assessment, and redesign of processes and systems, with each staff member of the cancer services team playing a role.

**Implementation:** Because cancer program standards demand that

patients receive care and outcomes comparable to nationwide standards, Stony Brook University Medical Center developed an Oncology Dashboard. Using input from the Cancer Committee, the Cancer Executive Council, the site-focused Disease Management Teams, and other cancer services professional

staff, data are collected on selected indicators and compared to benchmarks. The Hospital also reviews national guidelines, such as those provided by the National Comprehensive Cancer Network, College of American Pathologists, and Commission on Cancer, and selects benchmarks for quality monitoring.

## CANCER REGISTRY

Program Leaders: Vincine Kelly, CTR, Director; Margaret Celestino, Follow-Up Secretary; Audrey Hassett, CTR; Phillip Lindenmuth, CTR; and Carole Whitehead, CTR, Abstractors

**Overview:** The Stony Brook University Hospital and Medical Center's Cancer Registry electronically stores case records on all types of tumors entered into a database. Case ascertainment includes search and analysis of all admissions and ambulatory encounters. The database contains 40,829 records, with 31,954 added since the active case reference date of January 1, 1993. Epidemiologic data and annual follow-up are maintained on analytic cases. In accordance with national standards, security procedures are in place for confidentiality and disaster recovery.

Since its inception in 1984, the Cancer Registry Department has played an integral part in the interdisciplinary cancer care team by collecting relevant information, providing useful statistical summaries, and disseminating information about cancer program standards to members of the clinical, research, administrative, and education faculty. Staff provides input at cancer conferences and committee meetings, and functions to meet the institution's responsibility for Department of Health-mandated cancer reporting.

**Implementation:** Qualified researchers, administrators, and clinicians utilize de-identified cancer registry statistics for research, education, grant writing, administrative planning, and clinical outcomes measurements. Our participation in the American Cancer Society's Datalinks Web site and the Commission on Cancer's National Cancer Data Base annual call for data, as well as other special studies, contributes to the national database. This year, the registry participated in national studies on the impact of neoadjuvant therapy and staging breast and rectal cancer cases.

For collected data to meet specific quality standards, continuous quality assessments are performed daily via electronically programmed coding edits, weekly by physician advisor review, and annually by National Cancer Data Base electronic edit programs. The staff participates in the appropriate continuing education and professional association activities, and Stony Brook frequently hosts conferences and workshops.

Stony Brook's annual cancer site incidence tables and site specific surveys are posted at [www.stonybrookhospital.com/CancerRegistry/](http://www.stonybrookhospital.com/CancerRegistry/).

## TUMOR BOARDS

**Overview:** A key component of the cancer program and integral to patient management at Stony Brook, Tumor Board meetings provide a valued forum for the exchange of information, consultation, and collaboration. Cases are presented for diagnostic assessment, staging, treatment planning, retrospective review, and education during all phases of care. Tumor Board meetings also provide opportunities to participate in research protocols and to consider new and emerging standards for patient management.

**Implementation:** Multidisciplinary departmental and site-

focused tumor board meetings were held each week at Stony Brook University Medical Center in 2007. Physicians representing diagnostic radiology, pathology, surgery, and medical oncology participated in ongoing facility-wide conferences. Other participants included representatives from pulmonary medicine, dentistry, nursing, pain management, social work, pharmacy, nutrition, physical therapy, speech and hearing, cancer registry, and research. In addition, faculty, residents, interns, fellows, and students in all specialties attend and participate in discussion relevant to clinical education.

### TUMOR BOARD SCHEDULE

|                     |                                       |
|---------------------|---------------------------------------|
| Pediatric           | Mondays, 4:00 pm, weeks 1 and 3       |
| Thyroid, Head, Neck | Tuesdays, 7:30 am, quarterly week 1   |
| GI Upper            | Tuesdays, 7:30 am, weeks 1 and 3      |
| GI Lower            | Tuesdays, 7:30 am, weeks 1 and 3      |
| Melanoma            | Tuesdays, 7:30 am, week 2             |
| Neurologic Oncology | Tuesdays, 5:00 pm                     |
| Urology             | Tuesdays, 7:30 am, week 2             |
| Sarcoma             | Tuesdays, 7:30 am, week 4             |
| Gynecologic         | Wednesdays, 7:00 am, weeks 1, 2, 3, 5 |
| Lung                | Wednesdays, 3:30 pm, weeks 1 and 3    |
| Breast              | Fridays, 7:30 am                      |
| Leukemia/Lymphoma   | Fridays, noon                         |

## PROFESSIONAL EDUCATION IN CANCER CARE 2007 TO 2008

AMA PRA Category 1 Approved  
 School of Medicine/Office of Continuing Medical Education (OCME), Stony Brook University

| PROGRAM TITLE  | DATE                     | DEPARTMENT                            |
|--|--------------------------|---------------------------------------|
| Pathology Seminars in Pathology: A Continuing Update   | April 4 to June 20, 2007 | Pathology                             |
| Radiology: 28th Annual Radiology Research Seminar  | May 31, 2007             | Radiology                             |
| 19th Annual Conference on Mammography  | October 13, 2007         | OCME                                  |
| Radiology Visiting Professor Lectures  | December 6 to 12, 2007   | Radiology                             |
| Lung Cancer: Update on Screening, Staging, and Management                                      | January 12, 2008         | Medicine: Pulmonary and Critical Care |
| A Guide to Enhancing Colorectal Cancer Screening (Workbook)                                    | April 1, 2008            | Preventive Medicine                   |
| Colorectal Cancer Screening (online CME)   | April 1, 2008            | Preventive Medicine                   |
| Tumor Host Interactions Symposium 2008   | April 29, 2008           | Cancer Center Leadership              |
| 34th Annual Family Medicine Update, Seminars on Recent Advances in Colorectal Cancer Screening | May 28 to 31, 2008       | OCME                                  |
| Radiology: 29th Annual Radiology Research Seminar  | May 29, 2008             | Radiology                             |
| LICRA Spring Education Seminar   | June 6, 2008             | Cancer Registry                       |

# CANCER STATISTICS

## Cancer Site Distribution in 2007 by Case Type, Gender, and TNM Stage

| PRIMARY SITE 2007          | TOTAL | Patient Type |       | Gender |        | Stage Groups |     |     |     |     |     |     |
|----------------------------|-------|--------------|-------|--------|--------|--------------|-----|-----|-----|-----|-----|-----|
|                            |       | New          | Re-tx | Male   | Female | 0            | I   | II  | III | IV  | Unk | N/A |
| ALL SITES                  | 2600  | 2087         | 513   | 1017   | 1583   | 254          | 675 | 449 | 319 | 419 | 150 | 332 |
| ORAL CAVITY                | 67    | 57           | 10    | 41     | 26     | 1            | 7   | 9   | 6   | 35  | 7   | 2   |
| Lip                        | 1     | 1            | 0     | 0      | 1      | 0            | 0   | 0   | 0   | 1   | 0   | 0   |
| Tongue                     | 10    | 7            | 3     | 7      | 3      | 0            | 0   | 1   | 2   | 6   | 1   | 0   |
| Oropharynx                 | 5     | 4            | 1     | 2      | 3      | 0            | 0   | 0   | 0   | 5   | 0   | 0   |
| Hypopharynx                | 2     | 2            | 0     | 2      | 0      | 0            | 1   | 0   | 0   | 1   | 0   | 0   |
| Other oral cavity          | 49    | 43           | 6     | 30     | 19     | 1            | 6   | 8   | 4   | 22  | 6   | 2   |
| GASTROINTESTINAL           | 300   | 222          | 78    | 167    | 133    | 11           | 50  | 52  | 63  | 88  | 29  | 7   |
| Esophagus                  | 22    | 10           | 12    | 16     | 6      | 0            | 2   | 4   | 5   | 6   | 5   | 0   |
| Stomach                    | 29    | 24           | 5     | 23     | 6      | 0            | 8   | 4   | 3   | 10  | 2   | 2   |
| Colon, rectosigmoid        | 83    | 59           | 24    | 43     | 40     | 3            | 16  | 13  | 20  | 20  | 10  | 1   |
| Rectum                     | 54    | 39           | 15    | 27     | 27     | 3            | 13  | 11  | 12  | 10  | 5   | 0   |
| Anus, anal canal           | 11    | 10           | 1     | 6      | 5      | 3            | 1   | 5   | 0   | 1   | 1   | 0   |
| Liver                      | 24    | 18           | 6     | 17     | 7      | 0            | 4   | 2   | 8   | 8   | 1   | 1   |
| Pancreas                   | 55    | 43           | 12    | 28     | 27     | 1            | 2   | 8   | 14  | 27  | 2   | 1   |
| Other gastrointestinal     | 22    | 19           | 3     | 7      | 15     | 1            | 4   | 5   | 1   | 6   | 3   | 2   |
| RESPIRATORY                | 341   | 258          | 82    | 169    | 172    | 4            | 88  | 24  | 60  | 126 | 32  | 7   |
| Nasal/Sinus                | 5     | 5            | 0     | 4      | 1      | 0            | 0   | 4   | 0   | 0   | 0   | 1   |
| Larynx                     | 30    | 24           | 6     | 23     | 7      | 4            | 10  | 5   | 3   | 4   | 4   | 0   |
| Lung                       | 302   | 226          | 76    | 139    | 163    | 0            | 78  | 15  | 56  | 120 | 28  | 4   |
| Other respiratory          | 4     | 4            | 0     | 4      | 0      | 0            | 0   | 0   | 0   | 2   | 0   | 2   |
| BONE MARROW                | 108   | 79           | 29    | 63     | 45     | 0            | 1   | 0   | 0   | 0   | 0   | 107 |
| Leukemias                  | 62    | 50           | 12    | 32     | 30     | 0            | 0   | 0   | 0   | 0   | 0   | 62  |
| Multiple Myeloma           | 24    | 14           | 10    | 17     | 7      | 0            | 1   | 0   | 0   | 0   | 0   | 23  |
| Other hematopoietic        | 22    | 15           | 7     | 14     | 8      | 0            | 0   | 0   | 0   | 0   | 0   | 22  |
| BONE                       | 4     | 1            | 3     | 2      | 2      | 0            | 0   | 0   | 0   | 1   | 3   | 0   |
| SOFT TISSUE                | 19    | 19           | 0     | 8      | 11     | 0            | 7   | 3   | 5   | 2   | 2   | 0   |
| SKIN                       | 139   | 119          | 20    | 79     | 60     | 26           | 55  | 22  | 13  | 14  | 6   | 3   |
| Melanoma                   | 127   | 110          | 17    | 76     | 51     | 26           | 52  | 17  | 12  | 14  | 5   | 1   |
| Other skin                 | 12    | 9            | 3     | 3      | 9      | 0            | 3   | 5   | 1   | 0   | 1   | 2   |
| BREAST                     | 462   | 394          | 68    | 4      | 458    | 116          | 172 | 92  | 43  | 22  | 14  | 2   |
| FEMALE GENITAL             | 308   | 266          | 42    | 0      | 308    | 70           | 104 | 22  | 45  | 38  | 17  | 12  |
| Cervix Uteri               | 100   | 92           | 8     | 0      | 100    | 56           | 15  | 7   | 9   | 6   | 3   | 4   |
| Endometrium                | 104   | 92           | 12    | 0      | 104    | 0            | 64  | 5   | 12  | 13  | 5   | 5   |
| Ovary                      | 62    | 47           | 15    | 0      | 62     | 0            | 17  | 2   | 21  | 13  | 7   | 2   |
| Vulva                      | 29    | 24           | 5     | 0      | 29     | 12           | 8   | 5   | 2   | 1   | 1   | 0   |
| Other female genital sites | 13    | 11           | 2     | 0      | 13     | 2            | 0   | 3   | 1   | 5   | 1   | 1   |
| MALE GENITAL               | 229   | 147          | 82    | 229    | 0      | 0            | 11  | 181 | 7   | 18  | 11  | 1   |
| Prostate                   | 215   | 134          | 81    | 215    | 0      | 0            | 0   | 180 | 6   | 18  | 11  | 0   |
| Testis                     | 12    | 11           | 1     | 12     | 0      | 0            | 9   | 1   | 1   | 0   | 0   | 1   |
| Other male genital sites   | 2     | 2            | 0     | 2      | 0      | 0            | 2   | 0   | 0   | 0   | 0   | 0   |
| URINARY SYSTEM             | 115   | 90           | 25    | 70     | 45     | 26           | 33  | 13  | 9   | 23  | 10  | 1   |
| Urinary Bladder            | 61    | 45           | 16    | 41     | 20     | 25           | 5   | 7   | 4   | 14  | 5   | 1   |
| Kidney                     | 49    | 40           | 9     | 28     | 21     | 0            | 27  | 5   | 4   | 8   | 5   | 0   |
| Other urinary sites        | 5     | 5            | 0     | 1      | 4      | 1            | 1   | 1   | 1   | 1   | 0   | 0   |
| BRAIN & CNS                | 108   | 87           | 21    | 42     | 66     | 0            | 0   | 0   | 0   | 0   | 0   | 108 |
| Brain (benign)             | 6     | 5            | 1     | 3      | 3      | 0            | 0   | 0   | 0   | 0   | 0   | 6   |
| Brain (malignant)          | 33    | 31           | 2     | 21     | 12     | 0            | 0   | 0   | 0   | 0   | 0   | 33  |
| Other CNS sites            | 69    | 51           | 18    | 18     | 51     | 0            | 0   | 0   | 0   | 0   | 0   | 69  |
| ENDOCRINE                  | 236   | 218          | 18    | 72     | 164    | 0            | 122 | 14  | 55  | 11  | 9   | 25  |
| Thyroid                    | 211   | 197          | 14    | 62     | 149    | 0            | 122 | 14  | 55  | 11  | 9   | 0   |
| Other endocrine sites      | 25    | 21           | 4     | 10     | 15     | 0            | 0   | 0   | 0   | 0   | 0   | 25  |
| LYMPHATIC SYSTEM           | 102   | 77           | 25    | 51     | 51     | 0            | 23  | 17  | 13  | 40  | 8   | 1   |
| Hodgkin's Disease          | 16    | 15           | 1     | 8      | 8      | 0            | 4   | 3   | 2   | 6   | 1   | 0   |
| Non-Hodgkin's Lymphoma     | 86    | 62           | 24    | 43     | 43     | 0            | 19  | 14  | 11  | 34  | 7   | 1   |
| UNKNOWN PRIMARY            | 38    | 32           | 6     | 17     | 21     | 0            | 0   | 0   | 0   | 0   | 0   | 38  |
| ILL DEFINED SITES          | 24    | 20           | 4     | 2      | 22     | 0            | 2   | 0   | 1   | 1   | 2   | 18  |

This report includes all patients first encountered in 2007 at SBUMC for cancer of this primary site.  
 This report includes carcinoma in-situ of the cervix and breast.

## CONTACT NUMBERS

Phone numbers are in the 631 area code unless otherwise stated.

| <b>Cancer Center</b>                | <b>638-1000</b>    |
|-------------------------------------|--------------------|
| Cancer Helpline                     | (800) 862-2215     |
| Cancer Registry                     | 444-9844           |
| Carol M. Baldwin Breast Care Center | 638-1000           |
| Chaplaincy                          | 444-8157           |
| Child Life Program                  | 444-3840           |
| Dermatology                         | 444-4200           |
| Diagnostic Radiology                | 638-2121           |
| Gynecologic Oncology                | 638-1000           |
| Head and Neck Oncology              | 638-1000           |
| HealthConnect®                      | 444-4000           |
| Hematology/Oncology                 | 638-1000           |
| Lung Cancer Evaluation Center       | 444-2981           |
| Neurosurgical Oncology              | 444-1210           |
| Nursing                             | 444-2780           |
| Nutrition Services                  | 638-1000           |
| Pain Management Services            | 638-0800           |
| Pathology                           | 444-2222           |
| Patient Education Services          | 444-5263           |
| Pediatric Oncology                  | 444-7720           |
| Physical and Lymphedema Therapy     | 444-4240           |
| Preventive Medicine                 | 444-2190           |
| Radiation Oncology                  | 444-2200           |
| Social Work Services                | 444-2552           |
| Support Groups                      | 444-4000           |
| Surgical Oncology                   | 444-1825           |
| Survivorship and Supportive Care    | 444-2052, 638-2801 |
| Urologic Oncology                   | 444-1848           |

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NCDB Survival Reports. Cases Diagnosed 1998-2000, Lung, Prostate, Thyroid. National Cancer Data Base, Commission on Cancer, American College of Surgeons, Chicago, IL.

## THE CANCER COMMITTEE

The Cancer Committee is the designated multidisciplinary body for the administrative oversight, development, and review of cancer care services at Stony Brook University Medical Center. The Committee communicates directly with the Hospital's Medical Board, and its activities and recommendations directly impact programs. Members include physician representatives from the medical, surgical, diagnostic, and clinical areas along with representatives from supporting services involved with the care of patients with cancer.

### Physician Members

|                       |  |
|-----------------------|--|
| Theodore G. Gabig, MD | Chair, Cancer Committee<br>Medical Oncology/Hematology |
| Howard L. Adler, MD   | Urologic Surgery                                       |
| Daniel Baram, MD      | Pulmonary Medicine, LCEC                               |
| William Greene, MD    | Quality and Regulatory Affairs                         |
| Lynn Hallarman, MD    | Survivorship and Supportive Care                       |
| Andrzej Kudelka, MD   | Medical Oncology                                       |
| Seth O. Mankes, MD    | Diagnostic Radiology                                   |
| Brian O'Hea, MD       | Breast Surgery   |
| Colette Pameijer, MD  | Surgery, ACOS Liaison                                  |
| Robert I. Parker, MD  | Pediatric Oncology                                     |
| Tamara Weiss, MD      | Radiation Oncology                                     |
| Sui Zee, MD           | Pathology  |

### Non-Physician Members

|                         |                             |
|-------------------------|-----------------------------|
| Teresa Beutel           | Healthcare Teleservices     |
| Pamela Boremski, RN     | Quality Management          |
| Sabra Boughton, RN, PhD | Patient Education           |
| Rose C. Cardin, RN      | Nursing Administration      |
| Jennifer Fitzgibbon, RD | Oncology Nutrition          |
| Jeannie Gaspard, RN     | Cancer Center Nurse Manager |
| Patricia Hentschel, OCN | Clinical Trials             |
| Vencine Kelly, CTR      | Cancer Registry             |
| Susan McCarthy, LMSW    | Social Work                 |
| Kathleen Noone, RN      | Oncology Unit Manager       |
| Laurie Rafkin           | Hospital Administration     |
| Yvonne Spreckels        | Community Relations         |
| Lori Tischler, RN       | Cancer Helpline             |
| Cathy Tuppo, PT         | Physical Rehabilitation     |
| Stephen Unger           | Pastoral Care               |
| Scot Weber, RPh         | Pharmacy                    |





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